Mountain Lion Sightings While Deer Hunting

Survey Response Analysis

October 28, 2003

License Year 2002

Harvest Surveys

Montana Fish Wildlife and Parks

Table of Contents

Introduction 1

Tables of Expanded Statistical Estimates 9
1. Statewide Overview of Montana Resident Deer Hunters and Harvest, and Lion Observers 11
2. Deer Hunting Effort and Lion Observations 13
3. Statistical Confidence and Relative Precision..... 21
4. Additional Lion Observation Statistics 29

Appendix A: 2002 Mountain Lion Management Areas, Regulations/Quota Units, and Hunting Districts 37

Appendix B: 2002 Mountain Lion Sightings Survey Response Data Non-Expanded Summary Statistics 43

Appendix C: 2002 Mountain Lion Sightings Statistical Estimates Data File Description 51

Enclosures

2002 Deer Hunting and Harvest Survey Questionnaire
2002 Mountain Lion Sighting Survey Questionnaire

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Introduction

This report contains and analysis and summary of information returned from a supplemental survey of license year 2002 (LY2002) Montana resident deer survey respondents contacted by phone and reporting active hunting for deer. These respondents were asked if they sighted mountain lions while deer hunting and, if so, the number observed in deer Districts hunted. The **Mountain Lion Sighting Survey** specifically requested only those mountain lions observed while actively hunting deer. Each sighting was linked to a specific deer hunter expending a specific number of hunter days in a specific deer District. Thus mountain lion observations could be directly related to deer hunting effort and analyzed as an extension of the LY2002 deer hunter response data analysis.

Estimates of the number of **deer hunters**, number of **hunter days** devoted to deer hunting, number of hunters which were also **lion observers**, and number of **lions sighted** while deer hunting are presented at five different **levels of Location: Statewide, Regional, Lion Management Area, Lion Regulations/Quota Unit, and Hunting District**. (See **Appendix A** for a listing defining the Areas and Units in terms of Hunting Districts.) **Confidence bounds** at the 80% significance level are given for these estimates along with a measure of **relative precision**, as are various meaningful **ratios** of statistics based on these estimates.

As mentioned above, the analysis of Mountain Lion Sighting Survey response data is closely tied to the analysis of Deer Survey response data. This supplemental survey allowed reporting the "Number of Lions Sighted" for each "Deer District–Hunter Days" entry reported on the Deer Survey. (See the **Deer Survey** and the **Mountain Lion Sighting Survey Questionnaire** enclosures.) **The Mountain Lion Sighting Survey was asked of Montana resident deer survey respondents contacted by phone and reporting active hunting for deer.** Information on number of lion observers and lions sighted was directly linked to the deer hunting response data set for this subset of resident deer survey respondents. **Summary statistics from sighting survey responses were expanded to statistical estimates using the Montana resident deer hunter expansion factor, 2.865**. (See the **2002 Deer Hunting Report – Introduction** for the derivation of this expansion factor, and an overview of deer survey response data analysis.) Though the resident deer hunting expansion factor was used throughout this report, **the resident deer respondent subset analyzed was slightly reduced from that used in the Deer Hunting Report**. A small percentage (0.70%) of resident deer survey respondents were contacted by mail. These were not surveyed for lion sighting information, and were excluded from lion sighting analysis. Throughout this report, estimates of deer hunters and effort will be slightly lower than the estimates presented in the Deer Hunting Report. **The underlying population of potential mountain lion observers considered here is the population of resident active deer hunters with home phones.**

Table 1: Statewide Overview of Deer Hunters and Harvest, and Lion Observers

Table 1 presents overall Statewide estimates based on responses to the most basic questions on the deer hunting/harvest and mountain lion sighting survey response forms:

- **Did you hunt deer?**
- **If you hunted for deer, how many deer did you kill?**
- **If you hunted for deer, did you see one or more Mountain Lions while hunting for deer?**

Statewide estimates of Deer Hunters, Successful Hunters, Deer Harvest, and Lion Observers are presented, along with upper and lower 80% confidence bounds, plus meaningful ratios based on these statistics. **Two differing views are presented.**

The first view provides statewide estimates, plus estimates by Conservation Item of the sportsperson. This is meant to provide information on differences in mountain lion observation reports due to the type of conservation license a sportsperson holds. **The following statistics are presented by Conservation Item:**

- **Deer Hunters:** Point estimate of number of active MT resident deer hunters.
- **Hunters Low Bnd:** Lower bound 80% confidence bound on hunters.
- **Hunters Up Bnd:** Upper bound 80% confidence bound on hunters.
- **Success Hunters:** Point estimate of number of successful MT deer hunters.
- **S Hunter Low Bnd:** Lower bound 80% confidence bound on successful hunters.
- **S Hunter Up Bnd:** Upper bound 80% confidence bound on successful hunters.
- **Deer Harvest:** Point estimate of number of deer harvested by successful hunters.
- **Harvest Low Bnd:** Lower bound 80% confidence bound on harvest.
- **Harvest Up Bnd:** Upper bound 80% confidence bound on harvest.
- **Percent Success:** Ratio of successful hunters to active hunters. An estimate of percent of deer hunters who were successful.
- **Kill Per Hunter:** Ratio of harvest to active hunters. An estimate of the number of deer killed per active hunter.
- **Mtn Lion Observers:** Point estimate of number of deer hunters observing one or more mountain lions while deer hunting. Lion Observers.
- **Observers Low Bnd:** Lower bound 80% confidence bound on lion observers.
- **Observers Up Bnd:** Upper bound 80% confidence bound on lion observers.
- **Pcnt Lion Observers:** Ratio of observers to hunters. An estimate of percent of deer hunters who were also lion observers.

The second view provides statewide estimates, estimates by Conservation Item of the sportsperson, and estimates by success of the deer hunter. This is meant to provide information on differences in mountain lion observation reports due to whether the hunter succeeded in killing one or more deer. **The following statistical estimates are presented by Conservation Item and Hunter Success: Deer Hunters, Hunters Low Bnd, Hunters Up Bnd, Mtn Lion Observers, Observers Low Bnd, Observers Up Bnd, Pcnt Lion Observers.** Estimates are defined as above.

Beginning in LY2002 conservation licenses were issued over the counter via the FWP Automated Licensing System (ALS). All licenses issued through ALS were identified by a 7 digit Item Type. For conservation licenses, this code replaced the old 2 digit Conservation Prefix codes. However, while the method identifying each conservation license changed, the types issued remained basically the same. Therefore, these two tables remain comparable to those previously presented in LY2001 and LY2000, which presented the same information by Conservation Prefix. The presence of 3 resident deer hunters holding nonresident combo conservation licenses is due to first year errors in the way ALS assigned combo conservation item types and stored the residency of the holder.

The estimate of the population of statewide resident active deer hunters considered to be potential lion observers is 124,424 (±618 80% C.I., ±0.50% Relative Precision). Of these, 62% were successful, and they harvested an estimated 100,799 deer (±556, ±0.55%). Of this total population of active resident deer hunters, an estimated 1.87% observed one or more lions while deer hunting, for an estimate of 2,332 (±84, ±3.60%) resident deer hunters observing mountain lions while deer hunting. Percent Lion Observers was highest for "Flathead Conservation Disabled - 20-01-081" and "Resident Sportsman with Bear - 20-02-010" holders (5.26%, 3.23%). It was lowest for "Sportsman Landowner– 20-02-011" (0.78%). There was little difference in the percent reporting lion observations between successful and unsuccessful resident deer hunters (1.89% vs 1.86%).

The estimated population of resident active deer hunters (potential lion observers) was slightly higher in 2002 as compared to 2001 and 2000 (124,424 vs 117,526 vs 117,436). Estimated deer harvest was higher in 2002 than in either 2001 or 2000 (100,799 vs 90,451 vs 94,334). The

estimated number of lion observers did not significantly change in 2002 as compared to 2001, but was lower than the estimate for 2000 (2,332 vs 2,273 vs 3,078). The percent of the population of deer hunters observing lions slightly declined in 2002 as compared to 2001, which were significantly lower than in 2000 (1.87% vs 1.93% vs 2.62%).

Table 2: Deer Hunting Effort and Lion Observations

Table 2 presents estimates based on responses to the following questions on the deer hunting/harvest and mountain lion sighting survey response forms:

- **If you hunted for deer, list the Days Hunted by Deer District?**
- **If you hunted for deer, did you see one or more Mountain Lions while hunting for deer?**
- **If you saw one or more Mountain Lions while hunting for deer, list the number seen by Deer District (as listed above).**

Estimates of Montana resident Deer Hunters, Districts Hunted, Hunter Days, Lion Observers, and Lions Seen are presented, along with meaningful ratios based on these statistics which relate lion observations to deer hunting effort. These estimates are presented at 5 different levels of Location: Statewide, Regional, Lion Management Area, Lion Regulations/Quota Unit, and the Deer Hunting District (same as Lion District). See **Appendix A** for the Districts included in each Management Area and Regs/Quota Unit. **The following statistics are presented by Location:**

- **Deer Hunters:** Point estimate of number of active MT resident deer hunters.
- **Districts Hunted:** Point estimate of number of Districts hunted by deer hunters. This is presented only at the State and Regional levels.
- **Hunter Days:** Point estimate of number of days or parts of days spent hunting by deer hunters.
- **Distric/Hunter:** Ratio of Districts Hunted to Hunters. An estimate of the average number of Districts hunted by a deer Hunter. This is presented only at the State and Regional levels.
- **Days/Hunter:** Ratio of Hunter Days to Hunters. An estimate of the average number of days spent deer hunting by a deer hunter.
- **Days/Distric:** Ratio of Hunter Days to Districts. An estimate of the average number of days spent hunting in a District by a deer hunter. This is presented only at the State and Regional levels.
- **Hunter Observ:** Point estimate of number of deer hunters observing one or more mountain lions while deer hunting. Lion Observers.
- **Distric Observ:** Point estimate of number of deer Districts where lions were observed by deer hunters. This is presented only at the State and Regional levels. Lion Observation Districts.
- **Observ Days:** Point estimate of number of days spent hunting by deer hunters in Districts where lions were observed. Observation Days.
- **Lions Seen:** Point estimate of number of lions seen by deer hunters while deer hunting.
- **Percent Observ:** Ratio of observers to hunters. An estimate of percent of deer hunters who were also lion observers.
- **Distric/Observ:** Ratio of Districts Hunted to Lion Observers. The expected number of Districts a deer Hunter needs to hunt deer to observe a mountain lion. This is presented only at the State and Regional levels.
- **Days/Observ:** Ratio of Hunter Days to Lion Observers. The expected number of days a deer hunter needs to hunt deer to observe a mountain lion.
- **Hunters/Lion:** Ratio of deer Hunters to Lions Seen. The expected number of active deer hunters needed in the field to observe one mountain lion.
- **Days/Lion:** Ratio of Hunter Days to Lions Seen. The expected number of days a deer hunter needs to hunt deer to observe one mountain lion.

- **Distric/Lion:** Ratio of Districts Hunted to Lions Seen. The expected number of Districts a deer Hunter needs to hunt deer to observe one mountain lion. This is presented only at the State and Regional levels.
- **Lions/Observ:** Ratio of Lions Seen to Lion Observers. An estimate of the average number of lions seen by a lion observer hunting for deer.

The ratios of statistical estimates presented in Table 2 provide standardized information regarding deer hunter effort, and how this effort relates to mountain lions observed. Districts/Hunter and Days/Hunter provide measures of deer hunting effort, standardized to the estimated number of deer hunters. These ratios provide more comparable measures of deer hunter effort over time, and between Locations, than do the underlying estimates themselves. For example, by Region during 2002, resident deer hunters expended most effort hunting deer in Region 2, and least in Region 5 (8.51 vs 4.60 days/hunter).

Percent Observers (Lion Observers/Deer Hunters) is the likelihood a deer hunter will see one or more lions while deer hunting. It could be used as an indicator of lion observability over time and between Locations. For example, by Region during 2002, resident deer hunters were most likely to see one or more lions in Region 1, and least likely in Region 6 (2.77% vs 0.39%). Lion Management Areas with the highest Percent Observers were R1-Cabinet-Yaak (M1A, 4.0%) and R2-Lower Clark Fork (M2A, 3.2%). Hunting Districts with highest Percent Observers were 151, 100, and 200, at 13.3%, 4.9%, and 3.8% respectively.

Hunters/Lion is a similar measure of lion observability, standardized to the number of deer hunters. Instead of using number of lion observers, it uses number of lions seen. For example, by Region, it took the fewest number of deer hunters to see a lion in Region 2, and the most in Region 6 (22.5 vs 225 hunters/lion seen). Hunters/Lion may provided a finer measure of lion observability between Locations or over time, as compared to Percent Observers, but it may also be more subject to survey response bias. (The number of respondents reporting they saw Lion(s) by District may be more accurate and more stable over time than the number of lions reported in each District.)

Other possible indicators of mountain lion observability comparable over time and between locations include **Days/Observation** and **Days/Lion**. Here Lion Observers and Lions Seen are standardized to deer Hunter Days. Hunter days may be a more comparable measure of deer hunter effort than deer hunters, thus it may more directly standardize lion observability to deer hunting effort, and provide a more useful indicator of lion observability by Location and a more direct indicator of trends over time. For example, by Region, it requires the least number of deer Hunter Days to observe one or more lions in Region 1, and the most in Region 6 (292 vs 1362 days/observer). It requires the least number of deer Hunter Days to see a lion in Region 1, and the most in Region 6 (191 vs 1192 days/lion). The Lion Management Areas with the lowest deer hunter days per lion observation were R1-Cabinet-Yaak (M1A, 112) and R2-Lower Clark Fork (M2A,125).

Statewide, the number of days required for the average active deer hunter to see a lion while hunting deer increased in 2002 compared to 2001 and 2000 (377 vs 353 vs 263 days). The number of hunter days per lion seen increased as well (240 vs 232 vs 173 days). These indicators, and the decline in percent of hunters observing one or more lions in 2002 compared to 2001 and 2000 (1.87 vs 1.93 vs 2.62%), suggest it had become more difficult to observe lions while deer hunting over this 3 year period.

The ratio **Lions/Observer,** which standardizes lions seen to lion observers, may or may not be useful as a comparable indicator of lion observability, but it may prove useful in tracking lion sighting survey response characteristics over time. This indicator increased slightly in 2002, as compared to 2001 and 2000 (1.57 vs 1.52 vs 1.53).

Table 3: Statistical Confidence and Relative Precision

Table 3 presents measures of statistical confidence for the key estimates given in **Table 2**. Estimates of Montana resident Deer Hunters, Lion Observers, and Lions Seen are presented, along with Lower and Upper 80% Confidence Bounds, and Percent Relative Precision. As in **Table 2**, these estimates are presented at 5 different levels of Location: Statewide, Regional, Lion Management Area, Lion Regulations/Quota Unit, and the Deer Hunting District. (See **Appendix A**.)
The following statistics are presented by Location:

- **Deer Hunters:** Point estimate of number of active MT resident deer hunters.
- **Hunters Low Bnd:** Lower bound 80% confidence bound on hunters.
- **Hunters Up Bnd:** Upper bound 80% confidence bound on hunters.
- **Hunter % RPrec:** Percent by which the upper 80% Confidence Bound differs from the point estimate for active MT resident deer hunters.
- **Hunter Observ:** Point estimate of number of deer hunters observing one or more mountain lions while deer hunting. Lion Observers.
- **Observ Low Bnd:** Lower bound 80% confidence bound on lion observers.
- **Observ Up Bnd:** Upper bound 80% confidence bound on lion observers.
- **Observ % RPrec:** Percent by which the upper 80% Confidence Bound differs from the point estimate for lion observers.
- **Lions Seen:** Point estimate of number of lions seen by deer hunters while deer hunting.
- **Lions Low Bnd:** Lower bound 80% confidence bound on lions seen.
- **Lions Up Bnd:** Upper bound 80% confidence bound on lions seen.
- **Lions % RPrec:** Percent by which the upper 80% Confidence Bound differs from the point estimate for lions seen.

Confidence bounds and percent relative precision are indicators of the statistical variability of an estimate. The wider the confidence bound relative to the value of the estimate, the higher the variability (uncertainty) in the estimate, and the lower our confidence the estimate comes close to the true value of the statistic. Percent relative precision presents the concept of variability (uncertainty) in a form that is comparable for differing measures of the same statistic. It standardizes the width of the confidence bound by comparing it to the value of the estimate. The lower the value of percent relative precision for an estimate, the lower the variability (uncertainty) in the estimate, and the greater our confidence the estimate comes close to the true value of the statistic.

Relative precision of a hunter survey estimate depends on the expansion factor used to expand the underlying survey response summary count into a statistical point estimate, and the size of the underlying survey response summary count. The expansion factor is basically the inverse of the response rate ("Number of Resident Deer License Holders" divided by "Number of Resident Deer License Holders Responding to the Deer Survey"). A low expansion factor (close to 1) indicates a high response rate, and relatively good statistical precision (low variability, low uncertainty) in the estimate, relative to a high expansion factor. The second factor influencing precision of a survey based estimate is the magnitude of the sum of raw survey responses to a question, such as "Did you Hunt?" (Hunter estimate), "How many Days? (Hunter Days estimate), "Did you see Lion(s)" (Lion Observer estimate), and "How many Lions did you see?" (Lions Seen estimate). Larger raw response tallies indicating hunting or lion observations result in relatively good statistical precision (low variability, low uncertainty) in the expanded estimate, relative to smaller raw response tallies. As responses are lumped into larger groupings, such as grouping responses by Hunting District into responses by Management Area, the underlying raw response tallies increase, therefore statistical precision in the expanded estimate improves (variability decreases).

The **LY2002 Deer Hunting Report** resident expansion factor (**2.865**) was used to estimate values of all the statistics in this report at all levels and values of Location. Thus, precision of estimates of

deer hunting and lion sighting statistics will differ only according to the raw response tallies of the surveys returned from each Location. Estimates for hunting Districts popular with deer hunters will be more precise (better) than those from Districts less frequented. Sighting estimates from Districts where lions are more commonly observed will tend to be more precise (better) than those from Districts where lions are less common. This holds true for the higher levels of Location as well. Estimates at the higher levels of Location, which lump the survey responses into larger and larger groupings, will have better precision the more the responses are lumped together.

Table 3 illustrates the differences in Percent Relative Precision between different areas within the same level of Location, and differences between the different levels of Location. At the Hunting District level, average relative precision for estimates of Deer Hunters, Lion Observers, and Lions Seen were 6.8%, 58.8%, and 49.9%, respectively, over the 132 Districts where lions were reported. The estimates of active deer hunters have much better relative precision than the lion sighting estimates because few deer hunters observe lions (average of 1.87%), thus the raw tally of lion observer responses is very low compared to active deer hunter responses (**Appendix B**). Districts with the best relative precision in the estimate of Lion Observers are 100 (15.8%) and 411 (18.1%).

At the Lion Regulations/Quota Unit level of Location, average relative precision for the estimate of Lion Observers is 40.3% over the 70 Units where lions were reported. The 3 Regs/Quota Units with the best relative precision were R411 (15.1%), and R100 (15.8%). Even though lion observability is low in the R700 Unit (% Observers=0.80%), the estimate of Lion Observers (112) has a good relative precision compared to other Units because it includes all of Region 7, a large area popular with deer hunters, and thus lumps together a large number of responding active hunters (4,866) compared to other Units, which are generally much smaller groupings of Districts with fewer respondents.

At the Lion Management Area level of Location, average relative precision for the estimate of Lion Observers was 26.3% over the 24 areas where lions were reported. The 3 Management Areas with the best relative precision were R3-Mountain Foothills (M4B, 10.3%), R1-Salish (M1C, 11.0%) and R3-Belts-Bridgers-ElkhornMountain Foothills (M3D, 12.8%).

At the Regional level of Location, average relative precision for the estimate of Lion Observers is 20.2% over the 8 Regions where lions were reported. Region 1 and 2 had the best relative precision in the estimate (7.4% and 7.5%), while Region 6 had the worst of the Regions (27.7%). Relative precision in the Statewide estimate of Lion Observers is 3.6%. Confidence in the Statewide estimate of lion observers declined slightly in 2002. Percent relative precision was ±3.63% of the value of the estimate, compared to ±3.56% in 2001 and ±3.21% in 2000.

The precision of estimates will ultimately dictate how useful this survey of lion sightings by deer hunters will be as a trend indicator for lion density over time. Variability in the estimates must be low enough to permit detection of real underlying trends in lion density over time, at levels of Location which represent areas which are meaningful to lion management. Ratios of lion observation statistics to deer hunting effort statistics (see Table 2 description above) may prove more stable and more directly reflective of lion densities in a given area over time than stand alone estimates of total Lion Observers or total Lions Seen.

Table 4: Additional Lion Observation Statistics

Table 4 presents additional estimates and ratios of estimates based on responses to questions on the deer hunting/harvest and mountain lion sighting survey response forms. Estimates of MT resident Deer Hunters, Lion Observers, Lion Observation Districts, Lion Observation Days, and Lions Seen are presented, along with meaningful ratios of lion observation statistics. The additional statistics presented here may prove of some value in helping detect trends in lion densities, or trends in survey response characteristics, over time. These estimates are presented at 5 different

levels of Location: Statewide, Regional, Lion Management Area, Lion Regulations/Quota Unit, and the Deer Hunting District. **The following statistics are presented by Location:**

- **Deer Hunters:** Point estimate of number of active MT resident deer hunters.
- **Hunter Observ:** Point estimate of number of deer hunters observing one or more mountain lions while deer hunting. Lion Observers.
- **Distric Observ:** Point estimate of number of deer Districts where lions were observed by deer hunters. This is presented only at the State and Regional levels. Lion Observation Districts.
- **Observ Days:** Point estimate of number of days spent hunting by deer hunters in Districts where lions were observed. Observation Days.
- **Lions Seen:** Point estimate of number of lions seen by deer hunters while deer hunting.
- **Percent Observ:** Ratio of observers to hunters. An estimate of percent of deer hunters who were also lion observers.
- **Lions/Observ:** Ratio of Lions Seen to Lion Observers. An estimate of the average number of lions seen by a lion observer hunting for deer.
- **ObsDist/Observ:** Ratio of Lion Observation Districts to Lion Observers. The average number of Districts in which a Lion Observer see lions. This is presented only at the State and Regional levels.
- **ObsDays/Observ:** Ratio of Observer Days to Lion Observers. The average number of observation days a lion observer needs to observe mountain lions.
- **ObsDays/ObsDist:** Ratio of Observer Days to Observation Districts. The average number of observation days a spent hunting in Districts where lions were observed.
- **Lions/ObsDay:** Ratio of Lions Seen to Observer Days. An estimate of the average number of lions seen per observation day.
- **Lions/ObsDist:** Ratio of Lion Seen to Lion Observation Districts. The average number of lions seen per lion observation District. This is presented only at the State and Regional levels.

Appendix A: Lion Mgmt Areas, Regs/Quota Units, and Districts

Appendix A presents Lion Hunting Districts (same as Deer Districts) sorted by Region and Management Area. Descriptive names of Management Areas are given. Lion Regulation/Quota Units are also defined. This table shows which Districts are grouped into the higher levels of Location, as used in this report.

There were two changes in Deer/Lion Districts in LY2002, as compared to LY2000 and LY2001. **District 623 was dropped** and the area was incorporated into existing District 621. Statistics computed at the Management Area (M6A) or Regulations Unit (R600) levels of Location are unaffected by this change. **District 109 was added**. It was split off from District 101. New District 109 was assigned to the Management Area of 101, M1C=Salish, and the Regulations Unit of 101, R101=HD:101,109.

Appendix B: Non-expanded Response Summary Statistics

Appendix B presents the non-expanded raw summary tallies of the linked Deer Hunter and Lion Sighting Survey responses. Tallies of responding Deer Hunters and Lion Observers are listed, along with sums of reported Districts Hunted, Hunter Days, Observation Districts, Observation Days, and Lions Seen. The ratio Percent Observers is also given. These raw response statistics are presented at 5 different levels of Location: Statewide, Regional, Lion Management Area, Lion Regulations/Quota Unit, and the Deer Hunting District. **The following statistics are presented by Location:**

- **Responding Hunters:** Number of MT resident deer survey respondents reporting active hunting.
- **District Hunted:** Sum of Districts hunted for active MT resident deer survey respondents.
- **Hunter Days:** Sum of hunter days for active MT resident deer survey respondents.
- **Hunter Observ:** Number of active MT resident deer survey respondents reporting the sighting of one or more mountain lions while deer hunting. Respondent Lion Observers.
- **Distric Observ:** Sum of Districts reported where lions were observed by active MT resident deer survey respondents.
- **Observ Days:** Sum of hunter days reported where lions were observed by active MT resident deer survey respondents.
- **Lions Seen:** Sum of reported lions seen by active MT resident deer survey respondents.
- **Percent Observ:** Ratio of Responding Active Hunters to Respondent Lion Observers. An estimate of percent of deer hunters who were also lion observers.

Note that all the ratios of mountain lion sighting and deer hunting effort estimates provided in **Tables 2 and 4** can be computed from the underlying response summary statistics given in **Appendix B**. They remain the same whether computed from the underlying raw tallies and sums, or the expanded statistical estimates. Ratios of non-expanded summary statistics estimate true values of meaningful population statistics. Thus, it is not necessary to expand the survey response summary statistics to obtain potentially meaningful indicators of mountain lion density.

Appendix C: Statistical Estimates Data File Description

Appendix C presents a description of a data file of expanded estimates of "Mountain Lion Sighting while Deer Hunting" survey statistics. This data set contains all the estimates used to generate **Tables 2, 3, and 4**. It is available in compressed form for electronic distribution. It can be imported into a variety of data handling software. For example, this data set can be imported into a spreadsheet and sorted, selected, and formatted as desired for tabular or graphical presentation.

Notes Applying to Mountain Lion Sightings Tables

- **Undefined, missing, or not applicable values are flagged in the database and presented in the report as –9.9.** Undefined ratios and percents occur when the denominator of a ratio is zero. This occurs when the response data indicated no lion observations at a particular location.
- **The page numbers** in the lower right hand corner of each page indicate the consecutive page number in the report. The page numbers in the upper right of each table title header indicate a page within a given table. Each table will have numbered consecutive pages.
- **The date October 28, 2003** printed in the table title headers and throughout this report indicates the date the presented estimates of LY2002 mountain lion sighting statistics were generated. This provides a version stamp in the event the statistics are regenerated at a later date using altered source data or modified analysis techniques.

2002
Mountain Lion Sightings
While Deer Hunting

Tables of Expanded
Statistical Estimates

Table 1
Statewide Overview of Montana Resident
Deer Hunters and Harvest, and Lion Observers

Table 2
Deer Hunting Effort and Lion Observations

Table 3
Statistical Confidence and Relative Precision

Table 4
Additional Lion Observation Statistics

Tables 2, 3, and 4 presented by Location as follows:

Statewide and Regional
By Lion Management Area
By Lion Regulations/Quota Unit
By Hunting District

TABLE 1: STATEWIDE OVERVIEW

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Statewide Deer Hunters and Harvest, and Lion Observers
By Conservation Item of Hunter

Conservation License Name	Cons Item	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Success Hunters	S Hunter Low Bnd	S Hunter Up Bnd	Deer Harvest	Harvest Low Bnd	Harvest Up Bnd	Percent Success	Kill Per Hunter	Mtn Lion Observers	Observers Low Bnd	Observers Up Bnd	Pcnt Lion Observers
All MT Residents	ALL	124,424	123,806	125,041	76,612	76,127	77,096	100,799	100,243	101,354	61.6	0.810	2,332	2,248	2,417	1.87
Conservation	2001001	45,689	45,315	46,063	27,470	27,180	27,760	34,260	33,936	34,584	60.1	0.750	736	689	784	1.61
Flathead Use	2001074	2,040	1,961	2,119	1,100	1,042	1,158	1,461	1,394	1,528	53.9	0.716	32	22	41	1.54
Flathead Disable	2001081	54	42	67	23	15	31	26	17	35	42.1	0.474	3	0	6	5.26
Cons w/ Fishing	2002001	44,440	44,071	44,809	27,287	26,998	27,576	35,787	35,456	36,119	61.4	0.805	848	797	899	1.91
NCombo Elk OF	2002009	3	0	6	3	0	6	3	0	6	100.0	1.000	0	0	0	0.00
RSports w/ Bear	2002010	11,010	10,827	11,194	7,506	7,355	7,658	11,277	11,091	11,463	68.2	1.024	355	322	388	3.23
RSports Gen	2002012	15,592	15,373	15,810	9,644	9,472	9,816	13,406	13,203	13,608	61.9	0.860	261	232	289	1.67
RSports LO	2002011	367	333	400	235	208	262	281	251	310	64.1	0.766	3	0	6	0.78
RSports Yth	2002013	5,229	5,102	5,355	3,344	3,242	3,445	4,298	4,183	4,412	63.9	0.822	95	78	112	1.81

Statewide Deer Hunters and Lion Observers
By Conservation Item and Success of Hunter

Conservation License Name	Cons Item	Killed a Deer	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Mtn Lion Observers	Observers Low Bnd	Observers Up Bnd	Pcnt Lion Observers
All MT Residents	ALL	All	124,424	123,806	125,041	2,332	2,248	2,417	1.87
		No	47,812	47,429	48,195	905	853	958	1.89
		Yes	76,612	76,127	77,096	1,427	1,361	1,493	1.86
Conservation	2001001	All	45,689	45,315	46,063	736	689	784	1.61
		No	18,219	17,983	18,455	309	279	340	1.70
		Yes	27,470	27,180	27,760	427	391	463	1.55
Flathead Use	2001074	All	2,040	1,961	2,119	32	22	41	1.54
		No	940	886	993	11	6	17	1.22
		Yes	1,100	1,042	1,158	20	12	28	1.82
Flathead Disable	2001081	All	54	42	67	3	0	6	5.26
		No	32	22	41	3	0	6	9.09
		Yes	23	15	31	0	0	0	0.00
Cons w/ Fishing	2002001	All	44,440	44,071	44,809	848	797	899	1.91
		No	17,153	16,924	17,382	329	298	361	1.92
		Yes	27,287	26,998	27,576	519	479	558	1.90
NCombo Elk OF	2002009	All	3	0	6	0	0	0	0.00
		Yes	3	0	6	0	0	0	0.00
RSports w/ Bear	2002010	All	11,010	10,827	11,194	355	322	388	3.23
		No	3,504	3,400	3,608	120	101	140	3.43
		Yes	7,506	7,355	7,658	235	208	262	3.13
RSports Gen	2002012	All	15,592	15,373	15,810	261	232	289	1.67
		No	5,948	5,813	6,083	103	85	121	1.73
		Yes	9,644	9,472	9,816	158	136	180	1.63
RSports LO	2002011	All	367	333	400	3	0	6	0.78
		No	132	112	152	3	0	6	2.17
		Yes	235	208	262	0	0	0	0.00
RSports Yth	2002013	All	5,229	5,102	5,355	95	78	112	1.81
		No	1,885	1,809	1,961	26	17	35	1.37
		Yes	3,344	3,242	3,445	69	54	83	2.06

TABLE 2: DEER HUNTING EFFORT AND LION OBSERVATIONS

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Deer Hunting Effort and Lion Observations
Statewide and Regional

Location	Deer Hunters	District Hunted	Hunter Days	Distric /Hunter	Days/ Hunter	Days/ Distric	Hunter Observ	Distric Observ	Observ Days	Lions Seen	Percent Observ	Distric /Observ	Days/ Observ	Hunters /Lion	Days /Lion	Distric /Lion	Lions/ Observ
State	124,424	166,102	878,049	1.33	7.06	5.29	2,332	2,421	23,190	3,662	1.87	71.22	376.50	33.98	239.80	45.36	1.57
Region 1	20,287	26,539	163,962	1.31	8.08	6.18	562	599	5,856	860	2.77	47.26	291.98	23.60	190.76	30.88	1.53
Region 2	21,279	28,026	181,037	1.32	8.51	6.46	553	564	5,532	945	2.60	50.68	327.40	22.51	191.48	29.64	1.71
Region 3	27,427	33,427	189,343	1.22	6.90	5.66	461	467	5,083	751	1.68	72.47	410.48	36.54	252.24	44.53	1.63
Region 4	25,803	31,318	137,526	1.21	5.33	4.39	421	433	3,851	627	1.63	74.36	326.54	41.12	219.18	49.91	1.49
Region 5	17,480	19,861	80,348	1.14	4.60	4.05	192	201	1,607	287	1.10	103.46	418.57	61.01	280.44	69.32	1.49
Region 6	10,329	11,612	54,628	1.12	5.29	4.70	40	40	275	46	0.39	289.50	1361.93	225.31	1191.69	253.31	1.14
Region 7	13,959	15,010	70,016	1.08	5.02	4.66	112	112	868	126	0.80	134.33	626.62	110.73	555.41	119.07	1.13
Region U	309	309	1,189	1.00	3.84	3.84	6	6	117	20	1.85	54.00	207.50	15.43	59.29	15.43	3.50

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Deer Hunting Effort and Lion Observations
By Lion Management Area

Location	Lion Mgmt Area Name	Deer Hunters	Hunter Days	Days/ Hunter	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Days/ Observ	Hunters /Lion	Days /Lion	Lions/ Observ
M1A	CABINET-YAAK	3,808	27,467	7.21	152	1,561	246	3.99	180.89	15.45	111.48	1.62
M1B	CLARK FORK	2,834	23,296	8.22	69	1,017	97	2.43	338.79	29.09	239.15	1.42
M1C	SALISH	11,649	78,591	6.75	252	2,215	344	2.16	311.72	33.88	228.59	1.36
M1D	BOB MARSHALL-MISSIONS	3,599	22,476	6.25	72	599	109	1.99	313.80	33.05	206.45	1.52
M1E	WHITEFISH	1,349	7,810	5.79	26	301	49	1.91	302.89	27.71	160.35	1.89
M1F	URBAN	616	3,971	6.45	14	163	14	2.33	277.20	43.00	277.20	1.00
M1U	REGION 1 UNKNOWN	49	350	7.18	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
M2A	LOWER CLARK FORK	4,825	35,521	7.36	152	1,507	284	3.15	233.92	17.01	125.23	1.87
M2B	BITTERROOT	7,902	65,931	8.34	158	1,484	223	1.99	418.40	35.36	295.03	1.42
M2C	ROCK CR-DEERLODGE	3,541	27,421	7.74	77	799	149	2.18	354.48	23.77	184.06	1.93
M2D	BLACKFOOT	7,429	51,815	6.97	169	1,739	281	2.28	306.53	26.46	184.54	1.66
M2U	REGION 2 UNKNOWN	54	350	6.42	3	3	9	5.26	122.00	6.33	40.67	3.00
M3A	BIGHOLE	4,278	32,029	7.49	63	791	103	1.47	508.14	41.47	310.53	1.64
M3B	GRAVELLYS-PIONEERS	8,360	48,861	5.84	129	1,069	201	1.54	378.98	41.69	243.63	1.56
M3C	YELLOWSTONE	5,475	30,882	5.64	89	1,014	117	1.62	347.71	46.61	262.90	1.32
M3D	BELTS-BRIDGERS-ELKHORN	12,142	77,494	6.38	186	2,209	329	1.53	416.12	36.85	235.20	1.77
M3U	REGION 3 UNKNOWN	29	77	2.70	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
M4A	EAST FRONT	3,117	14,136	4.53	23	103	46	0.74	616.75	68.00	308.38	2.00
M4B	MOUNTAIN-FOOTHILLS	12,111	64,510	5.33	287	2,630	435	2.37	225.16	27.81	148.13	1.52
M4C	PRAIRE-AGRICULTURE	12,910	58,370	4.52	115	1,117	146	0.89	509.32	88.35	399.47	1.27
M4U	REGION 4 UNKNOWN	97	510	5.24	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
M5A	BEARTOOTH FACE	2,925	13,056	4.46	43	338	60	1.47	303.80	48.62	217.00	1.40
M5B	MOUNTAIN FOOTHILLS	3,745	16,044	4.28	52	413	72	1.38	311.11	52.28	224.00	1.39
M5C	PRAIRE-AGRICULTURE	11,999	51,012	4.25	106	857	155	0.88	481.22	77.56	329.72	1.46
M5U	REGION 5 UNKNOWN	86	235	2.73	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
M6A	REGION 6 DISTRICTS	10,303	54,485	5.29	40	275	46	0.39	1358.36	224.75	1188.56	1.14
M6U	REGION 6 UNKNOWN	29	143	5.00	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
M7A	REGION 7 DISTRICTS	13,941	69,956	5.02	112	868	126	0.80	626.08	110.59	554.93	1.13
M7U	REGION 7 UNKNOWN	17	60	3.50	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
M9U	REGION UNKNOWN	309	1,189	3.84	6	117	20	1.85	207.50	15.43	59.29	3.50

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Deer Hunting Effort and Lion Observations
By Lion Regulations/Quota Unit

Location	Lion Regs/Quota Unit HDs	Deer Hunters	Hunter Days	Days/ Hunter	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Days/ Observ	Hunters /Lion	Days /Lion	Lions/ Observ
R100	HD:100	2,524	15,864	6.28	123	1,172	178	4.88	128.77	14.21	89.31	1.44
R101	HD:101,109	2,871	18,024	6.28	69	742	106	2.40	262.13	27.08	170.03	1.54
R102	HD:102	3,275	17,666	5.39	52	327	60	1.57	342.56	54.43	293.62	1.17
R103	HD:103	2,922	18,122	6.20	63	490	74	2.16	287.50	39.23	243.27	1.18
R104	HD:104	1,799	11,603	6.45	37	390	69	2.07	311.54	26.17	168.75	1.85
R110	HD:110	1,349	7,810	5.79	26	301	49	1.91	302.89	27.71	160.35	1.89
R120	HD:120	2,246	12,108	5.39	40	390	49	1.79	301.86	46.12	248.59	1.21
R121	HD:121	2,166	17,331	8.00	63	891	83	2.91	274.95	26.07	208.59	1.32
R122	HD:122	1,994	12,672	6.35	32	266	54	1.58	402.09	36.63	232.79	1.73
R123	HD:123	401	2,504	6.24	9	126	14	2.14	291.33	28.00	174.80	1.67
R124	HD:124	381	3,461	9.08	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
R130	HD:130	1,902	9,629	5.06	46	387	72	2.41	210.06	26.56	134.44	1.56
R132	HD:132,170	1,974	13,159	6.67	29	307	32	1.45	459.30	62.64	417.55	1.10
R140	HD:140	367	2,358	6.43	3	3	3	0.78	823.00	128.00	823.00	1.00
R141	HD:141	155	880	5.69	3	57	11	1.85	307.00	13.50	76.75	4.00
R150	HD:150,151	57	421	7.35	6	9	6	10.00	73.50	10.00	73.50	1.00
R199	HD:R1 UNKN	49	350	7.18	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
R200	HD:200,201	2,702	17,654	6.53	60	593	117	2.23	293.43	23.00	150.29	1.95
R202	HD:202,203	2,728	17,867	6.55	95	914	166	3.47	188.97	16.41	107.52	1.76
R204	HD:204,260,261	3,822	30,175	7.90	63	785	80	1.65	478.73	47.64	376.14	1.27
R210	HD:210,211,216	1,367	9,670	7.08	34	453	83	2.52	281.25	16.45	116.38	2.42
R212	HD:212,215	1,882	14,214	7.55	37	321	60	1.98	381.62	31.29	236.24	1.62
R213	HD:213,214	570	3,538	6.21	6	26	6	1.01	617.50	99.50	617.50	1.00
R240	HD:240	2,292	14,377	6.27	23	221	34	1.00	627.25	66.67	418.17	1.50
R250	HD:250	1,232	8,853	7.19	29	218	32	2.33	309.00	39.09	280.91	1.10
R270	HD:270	2,083	12,526	6.01	43	261	77	2.06	291.47	26.93	161.93	1.80
R280	HD:280,281,284,293	1,974	13,775	6.98	37	255	52	1.89	369.85	38.28	267.11	1.38
R282	HD:282	203	937	4.61	3	52	6	1.41	327.00	35.50	163.50	2.00
R283	HD:283,285	3,323	19,311	5.81	69	544	106	2.07	280.83	31.35	182.16	1.54
R290	HD:290,291,292	2,610	17,792	6.82	60	888	117	2.31	295.71	22.22	151.46	1.95
R299	HD:R2 UNKN	54	350	6.42	3	3	9	5.26	122.00	6.33	40.67	3.00
R300	HD:300,302,328,329	1,306	7,888	6.04	14	77	20	1.10	550.60	65.14	393.29	1.40
R301	HD:301	986	5,699	5.78	23	309	29	2.33	248.63	34.40	198.90	1.25
R310	HD:310,311,360,361,362	3,008	15,864	5.27	29	378	37	0.95	553.70	80.77	425.92	1.30
R312	HD:312,393	2,965	17,084	5.76	32	453	57	1.06	542.09	51.75	298.15	1.82
R313	HD:313,316	441	1,716	3.89	3	3	3	0.65	599.00	154.00	599.00	1.00
R314	HD:314	880	4,418	5.02	14	86	23	1.63	308.40	38.38	192.75	1.60
R315	HD:315	1,931	8,561	4.43	34	284	60	1.78	249.00	32.10	142.29	1.75
R317	HD:317	673	3,186	4.73	20	238	26	2.98	158.86	26.11	123.56	1.29
R318	HD:318,350	1,051	7,678	7.30	17	244	29	1.63	446.67	36.70	268.00	1.67
R319	HD:319,341	1,255	10,360	8.26	20	370	46	1.60	516.57	27.38	226.00	2.29
R320	HD:320,333	3,444	19,090	5.54	74	822	129	2.16	256.27	26.71	148.07	1.73
R321	HD:321,331,332	1,808	12,228	6.76	20	212	29	1.11	609.71	63.10	426.80	1.43
R322	HD:322,326,330	2,430	11,687	4.81	23	80	26	0.94	509.88	94.22	453.22	1.13
R323	HD:323,324,325,327	1,739	10,197	5.86	17	89	26	0.99	593.17	67.44	395.44	1.50
R335	HD:335,339,343	2,123	14,348	6.76	34	341	66	1.62	417.33	32.22	217.74	1.92
R340	HD:340	1,530	9,440	6.17	23	209	29	1.50	411.88	53.40	329.50	1.25
R370	HD:370,380	2,524	15,325	6.07	14	109	17	0.57	1069.80	146.83	891.50	1.20
R390	HD:390,391,392	2,341	14,497	6.19	54	779	100	2.33	266.32	23.34	144.57	1.84
R399	HD:R3 UNKN	29	77	2.70	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
R400	HD:400,401,403,406,415,441	4,263	19,488	4.57	17	186	29	0.40	1133.67	148.80	680.20	1.67
R404	HD:404,421,444,450	3,705	16,305	4.40	20	89	23	0.54	813.00	161.63	711.38	1.14
R405	HD:405,447,471	4,071	16,824	4.13	49	493	54	1.20	345.41	74.79	309.05	1.12
R410	HD:410,417,419,426	3,286	14,300	4.35	37	384	52	1.13	383.92	63.72	277.28	1.38
R411	HD:411,412	4,871	25,104	5.15	135	1,269	203	2.76	186.43	23.94	123.41	1.51
R413	HD:413,432	2,914	13,460	4.62	66	630	92	2.26	204.26	31.78	146.81	1.39
R416	HD:416,446,449,452,454	2,137	11,838	5.54	40	424	60	1.88	295.14	35.52	196.76	1.50
R418	HD:418,420,448	1,435	8,171	5.69	32	183	60	2.20	259.27	23.86	135.81	1.91
R422	HD:422,423,424,425,442	1,200	5,590	4.66	14	69	34	1.19	390.20	34.92	162.58	2.40
R445	HD:445,455	1,624	5,936	3.65	17	123	20	1.06	345.33	81.00	296.00	1.17
R499	HD:R4 UNKN	97	510	5.24	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
R500	HD:500,570	3,590	12,947	3.61	32	341	43	0.88	410.82	83.53	301.27	1.36
R502	HD:502,575	4,412	18,104	4.10	29	172	43	0.65	631.90	102.67	421.27	1.50
R510	HD:510	854	4,369	5.12	14	198	20	1.68	305.00	42.57	217.86	1.40
R511	HD:511	739	2,725	3.69	3	17	9	0.39	951.00	86.00	317.00	3.00
R520	HD:520	1,908	9,091	4.76	32	272	46	1.65	288.45	41.62	198.31	1.45
R530	HD:530,590	4,596	19,961	4.34	46	344	69	1.00	435.44	66.83	290.29	1.50
R540	HD:540	696	3,352	4.81	9	29	9	1.23	390.00	81.00	390.00	1.00
R560	HD:560	1,046	3,965	3.79	11	66	14	1.10	346.00	73.00	276.80	1.25
R580	HD:580	1,570	5,598	3.57	26	169	34	1.64	217.11	45.67	162.83	1.33
R599	HD:R5 UNKN	86	235	2.73	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Deer Hunting Effort and Lion Observations
By Lion Regulations/Quota Unit

Location	Lion Regs/Quota Unit HDs	Deer Hunters	Hunter Days	Days/ Hunter	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Days/ Observ	Hunters /Lion	Days /Lion	Lions/ Observ
R600	HD:600'S (NOT 680,690)	8,291	43,749	5.28	17	77	20	0.21	2545.00	413.43	2181.43	1.17
R680	HD:680,690	2,318	10,735	4.63	23	198	26	0.99	468.38	89.89	416.33	1.13
R699	HD:R6 UNKN	29	143	5.00	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
R700	HD:700'S	13,941	69,956	5.02	112	868	126	0.80	626.08	110.59	554.93	1.13
R799	HD:R7 UNKN	17	60	3.50	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
R999	HD:REGION UNKN	309	1,189	3.84	6	117	20	1.85	207.50	15.43	59.29	3.50

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Deer Hunting Effort and Lion Observations
By Deer Hunting District

Location	Deer Hunters	Hunter Days	Days/ Hunter	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Days/ Observ	Hunters /Lion	Days /Lion	Lions/ Observ
100	2,524	15,864	6.28	123	1,172	178	4.88	128.77	14.21	89.31	1.44
101	2,564	16,136	6.29	66	713	95	2.57	244.87	27.12	170.67	1.43
102	3,275	17,666	5.39	52	327	60	1.57	342.56	54.43	293.62	1.17
103	2,922	18,122	6.20	63	490	74	2.16	287.50	39.23	243.27	1.18
104	1,799	11,603	6.45	37	390	69	2.07	311.54	26.17	168.75	1.85
109	370	1,888	5.11	3	29	11	0.78	659.00	32.25	164.75	4.00
110	1,349	7,810	5.79	26	301	49	1.91	302.89	27.71	160.35	1.89
120	2,246	12,108	5.39	40	390	49	1.79	301.86	46.12	248.59	1.21
121	2,166	17,331	8.00	63	891	83	2.91	274.95	26.07	208.59	1.32
122	1,994	12,672	6.35	32	266	54	1.58	402.09	36.63	232.79	1.73
123	401	2,504	6.24	9	126	14	2.14	291.33	28.00	174.80	1.67
124	381	3,461	9.08	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
130	1,902	9,629	5.06	46	387	72	2.41	210.06	26.56	134.44	1.56
132	1,401	9,188	6.56	14	143	17	1.02	641.40	81.50	534.50	1.20
140	367	2,358	6.43	3	3	3	0.78	823.00	128.00	823.00	1.00
141	155	880	5.69	3	57	11	1.85	307.00	13.50	76.75	4.00
150	43	335	7.80	6	9	6	13.33	58.50	7.50	58.50	1.00
151	14	86	6.00	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
170	616	3,971	6.45	14	163	14	2.33	277.20	43.00	277.20	1.00
199	49	350	7.18	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
200	688	5,406	7.86	26	332	46	3.75	209.67	15.00	117.94	1.78
201	2,114	12,248	5.79	34	261	72	1.63	356.25	29.52	171.00	2.08
202	1,636	10,985	6.71	52	504	100	3.15	213.00	16.31	109.54	1.94
203	1,241	6,882	5.55	46	410	66	3.70	150.13	18.83	104.43	1.44
204	1,756	10,033	5.71	32	350	49	1.79	318.36	36.06	206.00	1.55
210	923	5,750	6.23	20	143	69	2.17	286.71	13.42	83.63	3.43
211	238	1,937	8.14	9	189	9	3.61	225.33	27.67	225.33	1.00
212	1,246	9,291	7.46	23	158	29	1.84	405.38	43.50	324.30	1.25
213	298	1,662	5.58	3	17	3	0.96	580.00	104.00	580.00	1.00
214	324	1,877	5.80	3	9	3	0.88	655.00	113.00	655.00	1.00
215	713	4,922	6.90	14	163	32	2.01	343.60	22.64	156.18	2.20
216	309	1,983	6.41	6	120	6	1.85	346.00	54.00	346.00	1.00
240	2,292	14,377	6.27	23	221	34	1.00	627.25	66.67	418.17	1.50
250	1,232	8,853	7.19	29	218	32	2.33	309.00	39.09	280.91	1.10
260	1,430	14,305	10.01	20	335	20	1.40	713.29	71.29	713.29	1.00
261	908	5,836	6.43	11	100	11	1.26	509.25	79.25	509.25	1.00
270	2,083	12,526	6.01	43	261	77	2.06	291.47	26.93	161.93	1.80
280	112	499	4.46	3	3	3	2.56	174.00	39.00	174.00	1.00
281	1,057	7,294	6.90	23	169	37	2.17	318.25	28.38	195.85	1.63
282	203	937	4.61	3	52	6	1.41	327.00	35.50	163.50	2.00
283	1,289	7,060	5.48	32	278	43	2.44	224.00	30.00	164.27	1.36
284	172	991	5.77	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
285	2,220	12,251	5.52	37	266	63	1.68	328.92	35.23	194.36	1.69
290	178	1,490	8.39	3	17	6	1.61	520.00	31.00	260.00	2.00
291	507	2,942	5.80	6	43	9	1.13	513.50	59.00	342.33	1.50
292	1,983	13,360	6.74	52	828	103	2.60	259.06	19.22	129.53	2.00
293	819	4,991	6.09	11	83	11	1.40	435.50	71.50	435.50	1.00
299	54	350	6.42	3	3	9	5.26	122.00	6.33	40.67	3.00
300	341	1,819	5.34	6	29	11	1.68	317.50	29.75	158.75	2.00
301	986	5,699	5.78	23	309	29	2.33	248.63	34.40	198.90	1.25
302	347	1,828	5.27	3	20	3	0.83	638.00	121.00	638.00	1.00
310	195	1,051	5.40	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
311	2,066	10,011	4.85	20	172	23	0.97	499.14	90.13	436.75	1.14
312	1,943	11,174	5.75	20	341	29	1.03	557.14	67.80	390.00	1.43
313	430	1,665	3.87	3	3	3	0.67	581.00	150.00	581.00	1.00
314	880	4,418	5.02	14	86	23	1.63	308.40	38.38	192.75	1.60
315	1,931	8,561	4.43	34	284	60	1.78	249.00	32.10	142.29	1.75
316	11	52	4.50	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
317	673	3,186	4.73	20	238	26	2.98	158.86	26.11	123.56	1.29
318	524	4,025	7.68	3	43	3	0.55	1405.00	183.00	1405.00	1.00
319	825	6,627	8.03	3	103	3	0.35	2313.00	288.00	2313.00	1.00
320	1,364	8,180	6.00	34	415	77	2.52	237.92	17.63	105.74	2.25
321	350	2,172	6.21	3	40	3	0.82	758.00	122.00	758.00	1.00
322	1,232	5,249	4.26	20	63	20	1.63	261.71	61.43	261.71	1.00
323	229	1,043	4.55	3	14	9	1.25	364.00	26.67	121.33	3.00
324	504	2,891	5.73	9	52	11	1.70	336.33	44.00	252.25	1.33
325	908	5,229	5.76	6	23	6	0.63	912.50	158.50	912.50	1.00

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Deer Hunting Effort and Lion Observations
By Deer Hunting District

Location	Deer Hunters	Hunter Days	Days/ Hunter	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Days/ Observ	Hunters /Lion	Days /Lion	Lions/ Observ
326	768	3,515	4.58	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
327	192	1,034	5.39	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
328	235	1,347	5.73	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
329	510	2,894	5.67	6	29	6	1.12	505.00	89.00	505.00	1.00
330	536	2,922	5.45	3	17	6	0.53	1020.00	93.50	510.00	2.00
331	1,166	8,065	6.92	11	129	20	0.98	703.75	58.14	402.14	1.75
332	358	1,991	5.56	6	43	6	1.60	347.50	62.50	347.50	1.00
333	2,140	10,910	5.10	40	407	52	1.87	272.00	41.50	211.56	1.29
335	607	3,736	6.15	14	115	20	2.36	260.80	30.29	186.29	1.40
339	742	4,934	6.65	3	29	3	0.39	1722.00	259.00	1722.00	1.00
340	1,530	9,440	6.17	23	209	29	1.50	411.88	53.40	329.50	1.25
341	496	3,733	7.53	17	266	43	3.47	217.17	11.53	86.87	2.50
343	825	5,679	6.88	17	198	43	2.08	330.33	19.20	132.13	2.50
350	579	3,653	6.31	14	201	26	2.48	255.00	22.44	141.67	1.80
360	625	3,011	4.82	3	3	3	0.46	1051.00	218.00	1051.00	1.00
361	103	931	9.03	3	172	9	2.78	325.00	12.00	108.33	3.00
362	138	860	6.25	3	32	3	2.08	300.00	48.00	300.00	1.00
370	347	2,203	6.36	3	11	6	0.83	769.00	60.50	384.50	2.00
380	2,206	13,122	5.95	11	97	11	0.52	1145.00	192.50	1145.00	1.00
390	264	1,189	4.51	3	63	3	1.09	415.00	92.00	415.00	1.00
391	888	4,971	5.60	11	126	20	1.29	433.75	44.29	247.86	1.75
392	1,258	8,337	6.63	40	590	77	3.19	207.86	16.26	107.78	1.93
393	1,149	5,911	5.14	11	112	29	1.00	515.75	40.10	206.30	2.50
399	29	77	2.70	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
400	1,521	6,464	4.25	6	120	17	0.38	1128.00	88.50	376.00	3.00
401	1,418	6,031	4.25	9	52	9	0.61	701.67	165.00	701.67	1.00
403	269	1,054	3.91	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
404	2,444	10,652	4.36	11	54	11	0.47	929.50	213.25	929.50	1.00
405	1,180	3,705	3.14	9	9	9	0.73	431.00	137.33	431.00	1.00
406	748	3,046	4.07	3	14	3	0.38	1063.00	261.00	1063.00	1.00
410	1,077	5,065	4.70	9	17	9	0.80	589.33	125.33	589.33	1.00
411	3,103	15,531	5.01	95	914	135	3.05	164.27	23.04	115.34	1.42
412	2,117	9,572	4.52	43	355	69	2.03	222.73	30.79	139.21	1.60
413	1,865	7,773	4.17	40	301	43	2.15	193.79	43.40	180.87	1.07
415	92	387	4.22	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
416	819	4,140	5.05	17	178	17	2.10	240.83	47.67	240.83	1.00
417	745	3,578	4.80	11	261	23	1.54	312.25	32.50	156.13	2.00
418	725	4,060	5.60	11	63	26	1.58	354.25	28.11	157.44	2.25
419	582	2,043	3.51	11	69	14	1.97	178.25	40.60	142.60	1.25
420	186	794	4.26	3	3	3	1.54	277.00	65.00	277.00	1.00
421	539	1,854	3.44	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
422	266	1,123	4.22	3	17	14	1.08	392.00	18.60	78.40	5.00
423	312	1,375	4.40	3	6	3	0.92	480.00	109.00	480.00	1.00
424	261	1,183	4.54	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
425	172	688	4.00	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
426	997	3,613	3.62	6	37	6	0.57	630.50	174.00	630.50	1.00
432	1,198	5,687	4.75	26	329	49	2.15	220.56	24.59	116.76	1.89
441	593	2,507	4.23	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
442	255	1,221	4.79	9	46	17	3.37	142.00	14.83	71.00	2.00
444	441	1,685	3.82	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
445	1,533	5,555	3.62	17	123	20	1.12	323.17	76.43	277.00	1.17
446	410	2,177	5.31	6	97	14	1.40	380.00	28.60	152.00	2.50
447	2,218	10,016	4.52	37	481	43	1.68	268.92	51.60	233.07	1.15
448	645	3,318	5.15	20	117	32	3.11	165.43	20.45	105.27	1.57
449	441	2,232	5.06	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
450	418	2,114	5.05	9	34	11	2.05	246.00	36.50	184.50	1.33
452	221	971	4.40	6	23	11	2.60	169.50	19.25	84.75	2.00
454	430	2,318	5.39	11	126	17	2.67	202.25	25.00	134.83	1.50
455	92	381	4.16	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
471	888	3,103	3.49	3	3	3	0.32	1083.00	310.00	1083.00	1.00
499	97	510	5.24	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Deer Hunting Effort and Lion Observations
By Deer Hunting District

Location	Deer Hunters	Hunter Days	Days/ Hunter	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Days/ Observ	Hunters /Lion	Days /Lion	Lions/ Observ
500	1,997	7,249	3.63	20	292	29	1.00	361.43	69.70	253.00	1.43
502	1,656	6,776	4.09	9	49	9	0.52	788.33	192.67	788.33	1.00
510	854	4,369	5.12	14	198	20	1.68	305.00	42.57	217.86	1.40
511	739	2,725	3.69	3	17	9	0.39	951.00	86.00	317.00	3.00
520	1,908	9,091	4.76	32	272	46	1.65	288.45	41.62	198.31	1.45
530	1,604	6,369	3.97	23	195	34	1.43	277.88	46.67	185.25	1.50
540	696	3,352	4.81	9	29	9	1.23	390.00	81.00	390.00	1.00
560	1,046	3,965	3.79	11	66	14	1.10	346.00	73.00	276.80	1.25
570	1,650	5,699	3.45	11	49	14	0.69	497.25	115.20	397.80	1.25
575	2,934	11,328	3.86	20	123	34	0.68	564.86	85.33	329.50	1.71
580	1,570	5,598	3.57	26	169	34	1.64	217.11	45.67	162.83	1.33
590	3,120	13,592	4.36	23	149	34	0.73	593.00	90.75	395.33	1.50
599	86	235	2.73	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
600	1,097	5,200	4.74	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
610	602	2,699	4.49	3	3	3	0.48	942.00	210.00	942.00	1.00
611	458	1,636	3.57	3	3	3	0.63	571.00	160.00	571.00	1.00
620	828	3,235	3.91	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
621	444	2,538	5.72	9	57	9	1.94	295.33	51.67	295.33	1.00
622	206	1,000	4.85	3	14	6	1.39	349.00	36.00	174.50	2.00
630	1,046	5,779	5.53	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
631	163	756	4.63	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
632	195	897	4.60	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
640	1,163	6,252	5.37	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
641	284	1,427	5.03	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
650	923	3,779	4.10	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
651	848	4,432	5.23	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
652	186	693	3.72	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
670	765	3,427	4.48	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
680	484	2,083	4.30	3	60	6	0.59	727.00	84.50	363.50	2.00
690	1,891	8,652	4.58	20	138	20	1.06	431.43	94.29	431.43	1.00
699	29	143	5.00	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
700	2,412	10,649	4.41	17	135	17	0.71	619.50	140.33	619.50	1.00
701	2,851	11,354	3.98	23	329	29	0.80	495.38	99.50	396.30	1.25
702	1,914	8,435	4.41	37	186	40	1.95	226.46	47.71	210.29	1.08
703	2,710	15,984	5.90	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
704	2,877	13,291	4.62	32	189	37	1.10	421.73	77.23	356.85	1.18
705	2,229	10,243	4.60	3	29	3	0.13	3575.00	778.00	3575.00	1.00
799	17	60	3.50	0	0	0	0.00	-9.90	-9.90	-9.90	-9.90
999	309	1,189	3.84	6	117	20	1.85	207.50	15.43	59.29	3.50

October 28, 2003 page 1

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Statistical Confidence and Relative Precision of Estimates
Statewide and Regional

Location	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Hunter % RPrec	Hunter Observ	Observ LowBnd	Observ Up Bnd	Observ % RPrec	Lions Seen	Lions LowBnd	Lions Up Bnd	Lions % RPrec
State	124,424	123,806	125,041	0.50	2,332	2,248	2,417	3.63	3,662	3,556	3,768	2.89
Region 1	20,287	20,038	20,537	1.23	562	520	603	7.39	860	808	911	5.97
Region 2	21,279	21,023	21,534	1.20	553	512	594	7.45	945	892	999	5.69
Region 3	27,427	27,137	27,717	1.06	461	424	499	8.15	751	703	799	6.39
Region 4	25,803	25,521	26,084	1.09	421	385	457	8.53	627	584	671	6.99
Region 5	17,480	17,248	17,711	1.32	192	168	216	12.64	287	257	316	10.34
Region 6	10,329	10,151	10,506	1.72	40	29	51	27.65	46	34	58	25.86
Region 7	13,959	13,752	14,165	1.48	112	93	130	16.57	126	106	146	15.60
Region U	309	279	340	9.95	6	2	10	73.15	20	12	28	39.10

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Statistical Confidence and Relative Precision of Estimates
By Lion Management Area

Location	Lion Mgmt Area Name	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Hunter % RPrec	Hunter Observ	Observ LowBnd	Observ Up Bnd	Observ % RPrec	Lions Seen	Lions LowBnd	Lions Up Bnd	Lions % RPrec
M1A	CABINET-YAAK	3,808	3,700	3,916	2.84	152	130	173	14.21	246	219	274	11.16
M1B	CLARK FORK	2,834	2,740	2,927	3.29	69	54	83	21.12	97	80	115	17.74
M1C	SALISH	11,649	11,460	11,838	1.62	252	224	280	11.03	344	311	376	9.44
M1D	BOB MARSHALL-MISSIONS	3,599	3,493	3,704	2.92	72	57	86	20.69	109	91	127	16.78
M1E	WHITEFISH	1,349	1,285	1,414	4.77	26	17	35	34.48	49	36	61	25.09
M1F	URBAN	616	573	659	7.06	14	8	21	46.26	14	8	21	46.26
M1U	REGION 1 UNKNOWN	49	36	61	25.09	0	0	0	-9.90	0	0	0	-9.90
M2A	LOWER CLARK FORK	4,825	4,703	4,946	2.52	152	130	173	14.21	284	254	313	10.40
M2B	BITTERROOT	7,902	7,746	8,057	1.97	158	136	180	13.95	223	197	250	11.71
M2C	ROCK CR-DEERLODGE	3,541	3,437	3,645	2.94	77	62	93	19.91	149	128	170	14.35
M2D	BLACKFOOT	7,429	7,278	7,580	2.03	169	146	192	13.47	281	251	310	10.45
M2U	REGION 2 UNKNOWN	54	42	67	23.73	3	0	6	103.45	9	3	14	59.73
M3A	BIGHOLE	4,278	4,163	4,392	2.68	63	49	77	22.06	103	85	121	17.24
M3B	GRAVELLYS-PIONEERS	8,360	8,200	8,520	1.92	129	109	149	15.42	201	176	225	12.36
M3C	YELLOWSTONE	5,475	5,346	5,605	2.37	89	72	105	18.58	117	98	136	16.16
M3D	BELTS-BRIDGERS-ELKHORN	12,142	11,949	12,335	1.59	186	162	210	12.83	329	298	361	9.65
M3U	REGION 3 UNKNOWN	29	19	38	32.71	0	0	0	-9.90	0	0	0	-9.90
M4A	EAST FRONT	3,117	3,019	3,215	3.14	23	15	31	36.58	46	34	58	25.86
M4B	MOUNTAIN-FOOTHILLS	12,111	11,918	12,303	1.59	287	257	316	10.34	435	399	472	8.39
M4C	PRAIRE-AGRICULTURE	12,910	12,711	13,109	1.54	115	96	133	16.36	146	125	167	14.49
M4U	REGION 4 UNKNOWN	97	80	115	17.74	0	0	0	-9.90	0	0	0	-9.90
M5A	BEARTOOTH FACE	2,925	2,831	3,020	3.24	43	31	54	26.71	60	47	74	22.57
M5B	MOUNTAIN FOOTHILLS	3,745	3,637	3,852	2.86	52	39	64	24.38	72	57	86	20.69
M5C	PRAIRE-AGRICULTURE	11,999	11,807	12,191	1.60	106	88	124	17.01	155	133	176	14.08
M5U	REGION 5 UNKNOWN	86	70	102	18.89	0	0	0	-9.90	0	0	0	-9.90
M6A	REGION 6 DISTRICTS	10,303	10,125	10,480	1.73	40	29	51	27.65	46	34	58	25.86
M6U	REGION 6 UNKNOWN	29	19	38	32.71	0	0	0	-9.90	0	0	0	-9.90
M7A	REGION 7 DISTRICTS	13,941	13,735	14,148	1.48	112	93	130	16.57	126	106	146	15.60
M7U	REGION 7 UNKNOWN	17	10	24	42.23	0	0	0	-9.90	0	0	0	-9.90
M9U	REGION UNKNOWN	309	279	340	9.95	6	2	10	73.15	20	12	28	39.10

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Statistical Confidence and Relative Precision of Estimates
By Lion Regulations/Quota Unit

Location	Lion Regs/Quota Unit HDs	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Hunter % RPrec	Hunter Observ	Observ LowBnd	Observ Up Bnd	Observ % RPrec	Lions Seen	Lions LowBnd	Lions Up Bnd	Lions % RPrec
R100	HD:100	2,524	2,436	2,612	3.49	123	104	143	15.78	178	154	201	13.14
R101	HD:101,109	2,871	2,777	2,965	3.27	69	54	83	21.12	106	88	124	17.01
R102	HD:102	3,275	3,175	3,375	3.06	52	39	64	24.38	60	47	74	22.57
R103	HD:103	2,922	2,828	3,017	3.24	63	49	77	22.06	74	59	90	20.29
R104	HD:104	1,799	1,725	1,874	4.13	37	27	48	28.69	69	54	83	21.12
R110	HD:110	1,349	1,285	1,414	4.77	26	17	35	34.48	49	36	61	25.09
R120	HD:120	2,246	2,163	2,329	3.69	40	29	51	27.65	49	36	61	25.09
R121	HD:121	2,166	2,084	2,247	3.76	63	49	77	22.06	83	67	99	19.21
R122	HD:122	1,994	1,916	2,072	3.92	32	22	41	31.19	54	42	67	23.73
R123	HD:123	401	366	436	8.74	9	3	14	59.73	14	8	21	46.26
R124	HD:124	381	347	415	8.97	0	0	0	-9.90	0	0	0	-9.90
R130	HD:130	1,902	1,826	1,979	4.01	46	34	58	25.86	72	57	86	20.69
R132	HD:132,170	1,974	1,896	2,052	3.94	29	19	38	32.71	32	22	41	31.19
R140	HD:140	367	333	400	9.14	3	0	6	103.45	3	0	6	103.45
R141	HD:141	155	133	176	14.08	3	0	6	103.45	11	6	17	51.72
R150	HD:150,151	57	44	71	23.13	6	2	10	73.15	6	2	10	73.15
R199	HD:R1 UNKN	49	36	61	25.09	0	0	0	-9.90	0	0	0	-9.90
R200	HD:200,201	2,702	2,611	2,793	3.37	60	47	74	22.57	117	98	136	16.16
R202	HD:202,203	2,728	2,636	2,819	3.35	95	78	112	18.01	166	144	189	13.58
R204	HD:204,260,261	3,822	3,714	3,930	2.83	63	49	77	22.06	80	65	96	19.55
R210	HD:210,211,216	1,367	1,302	1,431	4.74	34	24	45	29.86	83	67	99	19.21
R212	HD:212,215	1,882	1,806	1,958	4.04	37	27	48	28.69	60	47	74	22.57
R213	HD:213,214	570	528	612	7.33	6	2	10	73.15	6	2	10	73.15
R240	HD:240	2,292	2,208	2,376	3.66	23	15	31	36.58	34	24	45	29.86
R250	HD:250	1,232	1,171	1,293	4.99	29	19	38	32.71	32	22	41	31.19
R270	HD:270	2,083	2,003	2,163	3.84	43	31	54	26.71	77	62	93	19.91
R280	HD:280,281,284,293	1,974	1,896	2,052	3.94	37	27	48	28.69	52	39	64	24.38
R282	HD:282	203	178	228	12.28	3	0	6	103.45	6	2	10	73.15
R283	HD:283,285	3,323	3,223	3,424	3.04	69	54	83	21.12	106	88	124	17.01
R290	HD:290,291,292	2,610	2,521	2,700	3.43	60	47	74	22.57	117	98	136	16.16
R299	HD:R2 UNKN	54	42	67	23.73	3	0	6	103.45	9	3	14	59.73
R300	HD:300,302,328,329	1,306	1,243	1,370	4.84	14	8	21	46.26	20	12	28	39.10
R301	HD:301	986	931	1,041	5.58	23	15	31	36.58	29	19	38	32.71
R310	HD:310,311,360,361,362	3,008	2,912	3,104	3.19	29	19	38	32.71	37	27	48	28.69
R312	HD:312,393	2,965	2,870	3,061	3.22	32	22	41	31.19	57	44	71	23.13
R313	HD:313,316	441	404	478	8.34	3	0	6	103.45	3	0	6	103.45
R314	HD:314	880	828	932	5.90	14	8	21	46.26	23	15	31	36.58
R315	HD:315	1,931	1,854	2,008	3.98	34	24	45	29.86	60	47	74	22.57
R317	HD:317	673	628	719	6.75	20	12	28	39.10	26	17	35	34.48
R318	HD:318,350	1,051	995	1,108	5.40	17	10	24	42.23	29	19	38	32.71
R319	HD:319,341	1,255	1,193	1,317	4.94	20	12	28	39.10	46	34	58	25.86
R320	HD:320,333	3,444	3,341	3,547	2.98	74	59	90	20.29	129	109	149	15.42
R321	HD:321,331,332	1,808	1,733	1,882	4.12	20	12	28	39.10	29	19	38	32.71
R322	HD:322,326,330	2,430	2,343	2,516	3.55	23	15	31	36.58	26	17	35	34.48
R323	HD:323,324,325,327	1,739	1,666	1,812	4.20	17	10	24	42.23	26	17	35	34.48
R335	HD:335,339,343	2,123	2,042	2,204	3.80	34	24	45	29.86	66	52	80	21.57
R340	HD:340	1,530	1,461	1,598	4.48	23	15	31	36.58	29	19	38	32.71
R370	HD:370,380	2,524	2,436	2,612	3.49	14	8	21	46.26	17	10	24	42.23
R390	HD:390,391,392	2,341	2,256	2,425	3.62	54	42	67	23.73	100	83	118	17.49
R399	HD:R3 UNKN	29	19	38	32.71	0	0	0	-9.90	0	0	0	-9.90
R400	HD:400,401,403,406,415,441	4,263	4,149	4,378	2.68	17	10	24	42.23	29	19	38	32.71
R404	HD:404,421,444,450	3,705	3,598	3,811	2.88	20	12	28	39.10	23	15	31	36.58
R405	HD:405,447,471	4,071	3,960	4,183	2.74	49	36	61	25.09	54	42	67	23.73
R410	HD:410,417,419,426	3,286	3,186	3,387	3.05	37	27	48	28.69	52	39	64	24.38
R411	HD:411,412	4,871	4,748	4,993	2.51	135	114	155	15.09	203	178	228	12.28
R413	HD:413,432	2,914	2,819	3,008	3.24	66	52	80	21.57	92	75	108	18.29
R416	HD:416,446,449,452,454	2,137	2,056	2,218	3.79	40	29	51	27.65	60	47	74	22.57
R418	HD:418,420,448	1,435	1,369	1,502	4.62	32	22	41	31.19	60	47	74	22.57
R422	HD:422,423,424,425,442	1,200	1,140	1,261	5.05	14	8	21	46.26	34	24	45	29.86
R445	HD:445,455	1,624	1,554	1,695	4.34	17	10	24	42.23	20	12	28	39.10
R499	HD:R4 UNKN	97	80	115	17.74	0	0	0	-9.90	0	0	0	-9.90

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Statistical Confidence and Relative Precision of Estimates
By Lion Regulations/Quota Unit

Location	Lion Regs/Quota Unit HDs	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Hunter % RPrec	Hunter Observ	Observ LowBnd	Observ Up Bnd	Observ % RPrec	Lions Seen	Lions LowBnd	Lions Up Bnd	Lions % RPrec
R500	HD:500,570	3,590	3,485	3,695	2.92	32	22	41	31.19	43	31	54	26.71
R502	HD:502,575	4,412	4,296	4,529	2.64	29	19	38	32.71	43	31	54	26.71
R510	HD:510	854	803	905	5.99	14	8	21	46.26	20	12	28	39.10
R511	HD:511	739	692	787	6.44	3	0	6	103.45	9	3	14	59.73
R520	HD:520	1,908	1,832	1,985	4.01	32	22	41	31.19	46	34	58	25.86
R530	HD:530,590	4,596	4,477	4,714	2.58	46	34	58	25.86	69	54	83	21.12
R540	HD:540	696	650	742	6.64	9	3	14	59.73	9	3	14	59.73
R560	HD:560	1,046	989	1,102	5.41	11	6	17	51.72	14	8	21	46.26
R580	HD:580	1,570	1,501	1,639	4.42	26	17	35	34.48	34	24	45	29.86
R599	HD:R5 UNKN	86	70	102	18.89	0	0	0	-9.90	0	0	0	-9.90
R600	HD:600'S (NOT 680,690)	8,291	8,132	8,451	1.92	17	10	24	42.23	20	12	28	39.10
R680	HD:680,690	2,318	2,234	2,402	3.64	23	15	31	36.58	26	17	35	34.48
R699	HD:R6 UNKN	29	19	38	32.71	0	0	0	-9.90	0	0	0	-9.90
R700	HD:700'S	13,941	13,735	14,148	1.48	112	93	130	16.57	126	106	146	15.60
R799	HD:R7 UNKN	17	10	24	42.23	0	0	0	-9.90	0	0	0	-9.90
R999	HD:REGION UNKN	309	279	340	9.95	6	2	10	73.15	20	12	28	39.10

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
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By Deer Hunting District

Location	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Hunter % RPrec	Hunter Observ	Observ LowBnd	Observ Up Bnd	Observ % RPrec	Lions Seen	Lions LowBnd	Lions Up Bnd	Lions % RPrec
100	2,524	2,436	2,612	3.49	123	104	143	15.78	178	154	201	13.14
101	2,564	2,476	2,653	3.46	66	52	80	21.57	95	78	112	18.01
102	3,275	3,175	3,375	3.06	52	39	64	24.38	60	47	74	22.57
103	2,922	2,828	3,017	3.24	63	49	77	22.06	74	59	90	20.29
104	1,799	1,725	1,874	4.13	37	27	48	28.69	69	54	83	21.12
109	370	336	403	9.11	3	0	6	103.45	11	6	17	51.72
110	1,349	1,285	1,414	4.77	26	17	35	34.48	49	36	61	25.09
120	2,246	2,163	2,329	3.69	40	29	51	27.65	49	36	61	25.09
121	2,166	2,084	2,247	3.76	63	49	77	22.06	83	67	99	19.21
122	1,994	1,916	2,072	3.92	32	22	41	31.19	54	42	67	23.73
123	401	366	436	8.74	9	3	14	59.73	14	8	21	46.26
124	381	347	415	8.97	0	0	0	-9.90	0	0	0	-9.90
130	1,902	1,826	1,979	4.01	46	34	58	25.86	72	57	86	20.69
132	1,401	1,335	1,467	4.68	14	8	21	46.26	17	10	24	42.23
140	367	333	400	9.14	3	0	6	103.45	3	0	6	103.45
141	155	133	176	14.08	3	0	6	103.45	11	6	17	51.72
150	43	31	54	26.71	6	2	10	73.15	6	2	10	73.15
151	14	8	21	46.26	0	0	0	-9.90	0	0	0	-9.90
170	616	573	659	7.06	14	8	21	46.26	14	8	21	46.26
199	49	36	61	25.09	0	0	0	-9.90	0	0	0	-9.90
200	688	642	734	6.68	26	17	35	34.48	46	34	58	25.86
201	2,114	2,034	2,195	3.81	34	24	45	29.86	72	57	86	20.69
202	1,636	1,565	1,707	4.33	52	39	64	24.38	100	83	118	17.49
203	1,241	1,179	1,302	4.97	46	34	58	25.86	66	52	80	21.57
204	1,756	1,683	1,830	4.18	32	22	41	31.19	49	36	61	25.09
210	923	869	976	5.77	20	12	28	39.10	69	54	83	21.12
211	238	211	265	11.36	9	3	14	59.73	9	3	14	59.73
212	1,246	1,184	1,308	4.96	23	15	31	36.58	29	19	38	32.71
213	298	268	328	10.14	3	0	6	103.45	3	0	6	103.45
214	324	292	355	9.73	3	0	6	103.45	3	0	6	103.45
215	713	667	760	6.56	14	8	21	46.26	32	22	41	31.19
216	309	279	340	9.95	6	2	10	73.15	6	2	10	73.15
240	2,292	2,208	2,376	3.66	23	15	31	36.58	34	24	45	29.86
250	1,232	1,171	1,293	4.99	29	19	38	32.71	32	22	41	31.19
260	1,430	1,363	1,496	4.63	20	12	28	39.10	20	12	28	39.10
261	908	855	961	5.81	11	6	17	51.72	11	6	17	51.72
270	2,083	2,003	2,163	3.84	43	31	54	26.71	77	62	93	19.91
280	112	93	130	16.57	3	0	6	103.45	3	0	6	103.45
281	1,057	1,000	1,114	5.39	23	15	31	36.58	37	27	48	28.69
282	203	178	228	12.28	3	0	6	103.45	6	2	10	73.15
283	1,289	1,226	1,352	4.88	32	22	41	31.19	43	31	54	26.71
284	172	149	195	13.36	0	0	0	-9.90	0	0	0	-9.90
285	2,220	2,138	2,303	3.72	37	27	48	28.69	63	49	77	22.06
290	178	154	201	13.14	3	0	6	103.45	6	2	10	73.15
291	507	468	547	7.78	6	2	10	73.15	9	3	14	59.73
292	1,983	1,905	2,061	3.93	52	39	64	24.38	103	85	121	17.24
293	819	769	870	6.12	11	6	17	51.72	11	6	17	51.72
299	54	42	67	23.73	3	0	6	103.45	9	3	14	59.73
300	341	309	373	9.48	6	2	10	73.15	11	6	17	51.72
301	986	931	1,041	5.58	23	15	31	36.58	29	19	38	32.71
302	347	314	379	9.40	3	0	6	103.45	3	0	6	103.45
310	195	170	219	12.55	0	0	0	-9.90	0	0	0	-9.90
311	2,066	1,986	2,145	3.85	20	12	28	39.10	23	15	31	36.58
312	1,943	1,865	2,020	3.97	20	12	28	39.10	29	19	38	32.71
313	430	393	466	8.45	3	0	6	103.45	3	0	6	103.45
314	880	828	932	5.90	14	8	21	46.26	23	15	31	36.58
315	1,931	1,854	2,008	3.98	34	24	45	29.86	60	47	74	22.57
316	11	6	17	51.72	0	0	0	-9.90	0	0	0	-9.90
317	673	628	719	6.75	20	12	28	39.10	26	17	35	34.48
318	524	484	564	7.65	3	0	6	103.45	3	0	6	103.45
319	825	775	875	6.10	3	0	6	103.45	3	0	6	103.45
320	1,364	1,299	1,428	4.74	34	24	45	29.86	77	62	93	19.91
321	350	317	382	9.37	3	0	6	103.45	3	0	6	103.45
322	1,232	1,171	1,293	4.99	20	12	28	39.10	20	12	28	39.10
323	229	203	256	11.57	3	0	6	103.45	9	3	14	59.73
324	504	465	544	7.80	9	3	14	59.73	11	6	17	51.72
325	908	855	961	5.81	6	2	10	73.15	6	2	10	73.15

Montana Fish Wildlife and Parks
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326	768	719	816	6.32	0	0	0	-9.90	0	0	0	-9.90
327	192	168	216	12.64	0	0	0	-9.90	0	0	0	-9.90
328	235	208	262	11.42	0	0	0	-9.90	0	0	0	-9.90
329	510	470	550	7.75	6	2	10	73.15	6	2	10	73.15
330	536	495	576	7.57	3	0	6	103.45	6	2	10	73.15
331	1,166	1,106	1,226	5.13	11	6	17	51.72	20	12	28	39.10
332	358	325	391	9.25	6	2	10	73.15	6	2	10	73.15
333	2,140	2,059	2,221	3.79	40	29	51	27.65	52	39	64	24.38
335	607	564	651	7.10	14	8	21	46.26	20	12	28	39.10
339	742	694	790	6.43	3	0	6	103.45	3	0	6	103.45
340	1,530	1,461	1,598	4.48	23	15	31	36.58	29	19	38	32.71
341	496	457	535	7.87	17	10	24	42.23	43	31	54	26.71
343	825	775	875	6.10	17	10	24	42.23	43	31	54	26.71
350	579	537	621	7.28	14	8	21	46.26	26	17	35	34.48
360	625	581	668	7.01	3	0	6	103.45	3	0	6	103.45
361	103	85	121	17.24	3	0	6	103.45	9	3	14	59.73
362	138	117	158	14.93	3	0	6	103.45	3	0	6	103.45
370	347	314	379	9.40	3	0	6	103.45	6	2	10	73.15
380	2,206	2,124	2,288	3.73	11	6	17	51.72	11	6	17	51.72
390	264	235	292	10.79	3	0	6	103.45	3	0	6	103.45
391	888	836	940	5.88	11	6	17	51.72	20	12	28	39.10
392	1,258	1,196	1,320	4.94	40	29	51	27.65	77	62	93	19.91
393	1,149	1,090	1,208	5.17	11	6	17	51.72	29	19	38	32.71
399	29	19	38	32.71	0	0	0	-9.90	0	0	0	-9.90
400	1,521	1,453	1,590	4.49	6	2	10	73.15	17	10	24	42.23
401	1,418	1,352	1,484	4.65	9	3	14	59.73	9	3	14	59.73
403	269	241	298	10.67	0	0	0	-9.90	0	0	0	-9.90
404	2,444	2,357	2,530	3.54	11	6	17	51.72	11	6	17	51.72
405	1,180	1,120	1,241	5.10	9	3	14	59.73	9	3	14	59.73
406	748	700	796	6.40	3	0	6	103.45	3	0	6	103.45
410	1,077	1,020	1,135	5.34	9	3	14	59.73	9	3	14	59.73
411	3,103	3,005	3,200	3.14	95	78	112	18.01	135	114	155	15.09
412	2,117	2,037	2,198	3.81	43	31	54	26.71	69	54	83	21.12
413	1,865	1,790	1,941	4.05	40	29	51	27.65	43	31	54	26.71
415	92	75	108	18.29	0	0	0	-9.90	0	0	0	-9.90
416	819	769	870	6.12	17	10	24	42.23	17	10	24	42.23
417	745	697	793	6.42	11	6	17	51.72	23	15	31	36.58
418	725	678	772	6.50	11	6	17	51.72	26	17	35	34.48
419	582	539	624	7.26	11	6	17	51.72	14	8	21	46.26
420	186	162	210	12.83	3	0	6	103.45	3	0	6	103.45
421	539	498	579	7.54	0	0	0	-9.90	0	0	0	-9.90
422	266	238	295	10.73	3	0	6	103.45	14	8	21	46.26
423	312	281	343	9.91	3	0	6	103.45	3	0	6	103.45
424	261	232	289	10.84	0	0	0	-9.90	0	0	0	-9.90
425	172	149	195	13.36	0	0	0	-9.90	0	0	0	-9.90
426	997	942	1,052	5.55	6	2	10	73.15	6	2	10	73.15
432	1,198	1,137	1,258	5.06	26	17	35	34.48	49	36	61	25.09
441	593	550	636	7.19	0	0	0	-9.90	0	0	0	-9.90
442	255	227	283	10.97	9	3	14	59.73	17	10	24	42.23
444	441	404	478	8.34	0	0	0	-9.90	0	0	0	-9.90
445	1,533	1,464	1,601	4.47	17	10	24	42.23	20	12	28	39.10
446	410	374	445	8.65	6	2	10	73.15	14	8	21	46.26
447	2,218	2,135	2,300	3.72	37	27	48	28.69	43	31	54	26.71
448	645	600	689	6.90	20	12	28	39.10	32	22	41	31.19
449	441	404	478	8.34	0	0	0	-9.90	0	0	0	-9.90
450	418	382	454	8.56	9	3	14	59.73	11	6	17	51.72
452	221	195	247	11.79	6	2	10	73.15	11	6	17	51.72
454	430	393	466	8.45	11	6	17	51.72	17	10	24	42.23
455	92	75	108	18.29	0	0	0	-9.90	0	0	0	-9.90
471	888	836	940	5.88	3	0	6	103.45	3	0	6	103.45
499	97	80	115	17.74	0	0	0	-9.90	0	0	0	-9.90

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Statistical Confidence and Relative Precision of Estimates
By Deer Hunting District

Location	Deer Hunters	Hunters Low Bnd	Hunters Up Bnd	Hunter % RPrec	Hunter Observ	Observ LowBnd	Observ Up Bnd	Observ % RPrec	Lions Seen	Lions LowBnd	Lions Up Bnd	Lions % RPrec
500	1,997	1,919	2,075	3.92	20	12	28	39.10	29	19	38	32.71
502	1,656	1,585	1,727	4.30	9	3	14	59.73	9	3	14	59.73
510	854	803	905	5.99	14	8	21	46.26	20	12	28	39.10
511	739	692	787	6.44	3	0	6	103.45	9	3	14	59.73
520	1,908	1,832	1,985	4.01	32	22	41	31.19	46	34	58	25.86
530	1,604	1,534	1,675	4.37	23	15	31	36.58	34	24	45	29.86
540	696	650	742	6.64	9	3	14	59.73	9	3	14	59.73
560	1,046	989	1,102	5.41	11	6	17	51.72	14	8	21	46.26
570	1,650	1,579	1,721	4.31	11	6	17	51.72	14	8	21	46.26
575	2,934	2,839	3,029	3.23	20	12	28	39.10	34	24	45	29.86
580	1,570	1,501	1,639	4.42	26	17	35	34.48	34	24	45	29.86
590	3,120	3,022	3,218	3.13	23	15	31	36.58	34	24	45	29.86
599	86	70	102	18.89	0	0	0	-9.90	0	0	0	-9.90
600	1,097	1,039	1,155	5.29	0	0	0	-9.90	0	0	0	-9.90
610	602	559	645	7.14	3	0	6	103.45	3	0	6	103.45
611	458	421	496	8.18	3	0	6	103.45	3	0	6	103.45
620	828	778	878	6.09	0	0	0	-9.90	0	0	0	-9.90
621	444	407	481	8.31	9	3	14	59.73	9	3	14	59.73
622	206	181	231	12.19	3	0	6	103.45	6	2	10	73.15
630	1,046	989	1,102	5.41	0	0	0	-9.90	0	0	0	-9.90
631	163	141	186	13.70	0	0	0	-9.90	0	0	0	-9.90
632	195	170	219	12.55	0	0	0	-9.90	0	0	0	-9.90
640	1,163	1,103	1,223	5.13	0	0	0	-9.90	0	0	0	-9.90
641	284	254	313	10.40	0	0	0	-9.90	0	0	0	-9.90
650	923	869	976	5.77	0	0	0	-9.90	0	0	0	-9.90
651	848	797	899	6.01	0	0	0	-9.90	0	0	0	-9.90
652	186	162	210	12.83	0	0	0	-9.90	0	0	0	-9.90
670	765	717	813	6.33	0	0	0	-9.90	0	0	0	-9.90
680	484	446	523	7.96	3	0	6	103.45	6	2	10	73.15
690	1,891	1,815	1,967	4.03	20	12	28	39.10	20	12	28	39.10
699	29	19	38	32.71	0	0	0	-9.90	0	0	0	-9.90
700	2,412	2,326	2,498	3.57	17	10	24	42.23	17	10	24	42.23
701	2,851	2,757	2,944	3.28	23	15	31	36.58	29	19	38	32.71
702	1,914	1,837	1,990	4.00	37	27	48	28.69	40	29	51	27.65
703	2,710	2,619	2,802	3.36	0	0	0	-9.90	0	0	0	-9.90
704	2,877	2,783	2,970	3.26	32	22	41	31.19	37	27	48	28.69
705	2,229	2,146	2,312	3.71	3	0	6	103.45	3	0	6	103.45
799	17	10	24	42.23	0	0	0	-9.90	0	0	0	-9.90
999	309	279	340	9.95	6	2	10	73.15	20	12	28	39.10

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Additional Lion Observation Statistics
Statewide and Regional

Location	Deer Hunters	Hunter Observ	Distric Observ	Observ Days	Lions Seen	Percent Observ	Lions/ Observ	ObsDist /Observ	ObsDays /Observ	ObsDays /ObsDist	Lions/ ObsDay	Lions/ ObsDist
State	124,424	2,332	2,421	23,190	3,662	1.87	1.57	1.04	9.94	9.58	0.16	1.51
Region 1	20,287	562	599	5,856	860	2.77	1.53	1.07	10.43	9.78	0.15	1.44
Region 2	21,279	553	564	5,532	945	2.60	1.71	1.02	10.01	9.80	0.17	1.68
Region 3	27,427	461	467	5,083	751	1.68	1.63	1.01	11.02	10.88	0.15	1.61
Region 4	25,803	421	433	3,851	627	1.63	1.49	1.03	9.14	8.90	0.16	1.45
Region 5	17,480	192	201	1,607	287	1.10	1.49	1.04	8.37	8.01	0.18	1.43
Region 6	10,329	40	40	275	46	0.39	1.14	1.00	6.86	6.86	0.17	1.14
Region 7	13,959	112	112	868	126	0.80	1.13	1.00	7.77	7.77	0.15	1.13
Region U	309	6	6	117	20	1.85	3.50	1.00	20.50	20.50	0.17	3.50

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Additional Lion Observation Statistics
By Lion Management Area

Location	Lion Mgmt Area Name	Deer Hunters	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Lions/ Observ	ObsDays /Observ	Lions/ ObsDay
M1A	CABINET-YAAK	3,808	152	1,561	246	3.99	1.62	10.28	0.16
M1B	CLARK FORK	2,834	69	1,017	97	2.43	1.42	14.79	0.10
M1C	SALISH	11,649	252	2,215	344	2.16	1.36	8.78	0.16
M1D	BOB MARSHALL-MISSIONS	3,599	72	599	109	1.99	1.52	8.36	0.18
M1E	WHITEFISH	1,349	26	301	49	1.91	1.89	11.67	0.16
M1F	URBAN	616	14	163	14	2.33	1.00	11.40	0.09
M1U	REGION 1 UNKNOWN	49	0	0	0	0.00	-9.90	-9.90	-9.00
M2A	LOWER CLARK FORK	4,825	152	1,507	284	3.15	1.87	9.92	0.19
M2B	BITTERROOT	7,902	158	1,484	223	1.99	1.42	9.42	0.15
M2C	ROCK CR-DEERLODGE	3,541	77	799	149	2.18	1.93	10.33	0.19
M2D	BLACKFOOT	7,429	169	1,739	281	2.28	1.66	10.29	0.16
M2U	REGION 2 UNKNOWN	54	3	3	9	5.26	3.00	1.00	3.00
M3A	BIGHOLE	4,278	63	791	103	1.47	1.64	12.55	0.13
M3B	GRAVELLYS-PIONEERS	8,360	129	1,069	201	1.54	1.56	8.29	0.19
M3C	YELLOWSTONE	5,475	89	1,014	117	1.62	1.32	11.42	0.12
M3D	BELTS-BRIDGERS-ELKHORN	12,142	186	2,209	329	1.53	1.77	11.86	0.15
M3U	REGION 3 UNKNOWN	29	0	0	0	0.00	-9.90	-9.90	-9.00
M4A	EAST FRONT	3,117	23	103	46	0.74	2.00	4.50	0.44
M4B	MOUNTAIN-FOOTHILLS	12,111	287	2,630	435	2.37	1.52	9.18	0.17
M4C	PRAIRE-AGRICULTURE	12,910	115	1,117	146	0.89	1.27	9.75	0.13
M4U	REGION 4 UNKNOWN	97	0	0	0	0.00	-9.90	-9.90	-9.00
M5A	BEARTOOTH FACE	2,925	43	338	60	1.47	1.40	7.87	0.18
M5B	MOUNTAIN FOOTHILLS	3,745	52	413	72	1.38	1.39	8.00	0.17
M5C	PRAIRE-AGRICULTURE	11,999	106	857	155	0.88	1.46	8.08	0.18
M5U	REGION 5 UNKNOWN	86	0	0	0	0.00	-9.90	-9.90	-9.00
M6A	REGION 6 DISTRICTS	10,303	40	275	46	0.39	1.14	6.86	0.17
M6U	REGION 6 UNKNOWN	29	0	0	0	0.00	-9.90	-9.90	-9.00
M7A	REGION 7 DISTRICTS	13,941	112	868	126	0.80	1.13	7.77	0.15
M7U	REGION 7 UNKNOWN	17	0	0	0	0.00	-9.90	-9.90	-9.00
M9U	REGION UNKNOWN	309	6	117	20	1.85	3.50	20.50	0.17

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Additional Lion Observation Statistics
By Lion Regulations/Quota Unit

Location	Lion Regs/Quota Unit HDs	Deer Hunters	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Lions/ Observ	ObsDays /Observ	Lions/ ObsDay
R100	HD:100	2,524	123	1,172	178	4.88	1.44	9.51	0.15
R101	HD:101,109	2,871	69	742	106	2.40	1.54	10.79	0.14
R102	HD:102	3,275	52	327	60	1.57	1.17	6.33	0.18
R103	HD:103	2,922	63	490	74	2.16	1.18	7.77	0.15
R104	HD:104	1,799	37	390	69	2.07	1.85	10.46	0.18
R110	HD:110	1,349	26	301	49	1.91	1.89	11.67	0.16
R120	HD:120	2,246	40	390	49	1.79	1.21	9.71	0.12
R121	HD:121	2,166	63	891	83	2.91	1.32	14.14	0.09
R122	HD:122	1,994	32	266	54	1.58	1.73	8.45	0.20
R123	HD:123	401	9	126	14	2.14	1.67	14.67	0.11
R124	HD:124	381	0	0	0	0.00	-9.90	-9.90	-9.00
R130	HD:130	1,902	46	387	72	2.41	1.56	8.44	0.19
R132	HD:132,170	1,974	29	307	32	1.45	1.10	10.70	0.10
R140	HD:140	367	3	3	3	0.78	1.00	1.00	1.00
R141	HD:141	155	3	57	11	1.85	4.00	20.00	0.20
R150	HD:150,151	57	6	9	6	10.00	1.00	1.50	0.67
R199	HD:R1 UNKN	49	0	0	0	0.00	-9.90	-9.90	-9.00
R200	HD:200,201	2,702	60	593	117	2.23	1.95	9.86	0.20
R202	HD:202,203	2,728	95	914	166	3.47	1.76	9.67	0.18
R204	HD:204,260,261	3,822	63	785	80	1.65	1.27	12.45	0.10
R210	HD:210,211,216	1,367	34	453	83	2.52	2.42	13.17	0.18
R212	HD:212,215	1,882	37	321	60	1.98	1.62	8.62	0.19
R213	HD:213,214	570	6	26	6	1.01	1.00	4.50	0.22
R240	HD:240	2,292	23	221	34	1.00	1.50	9.62	0.16
R250	HD:250	1,232	29	218	32	2.33	1.10	7.60	0.14
R270	HD:270	2,083	43	261	77	2.06	1.80	6.07	0.30
R280	HD:280,281,284,293	1,974	37	255	52	1.89	1.38	6.85	0.20
R282	HD:282	203	3	52	6	1.41	2.00	18.00	0.11
R283	HD:283,285	3,323	69	544	106	2.07	1.54	7.92	0.19
R290	HD:290,291,292	2,610	60	888	117	2.31	1.95	14.76	0.13
R299	HD:R2 UNKN	54	3	3	9	5.26	3.00	1.00	3.00
R300	HD:300,302,328,329	1,306	14	77	20	1.10	1.40	5.40	0.26
R301	HD:301	986	23	309	29	2.33	1.25	13.50	0.09
R310	HD:310,311,360,361,362	3,008	29	378	37	0.95	1.30	13.20	0.10
R312	HD:312,393	2,965	32	453	57	1.06	1.82	14.36	0.13
R313	HD:313,316	441	3	3	3	0.65	1.00	1.00	1.00
R314	HD:314	880	14	86	23	1.63	1.60	6.00	0.27
R315	HD:315	1,931	34	284	60	1.78	1.75	8.25	0.21
R317	HD:317	673	20	238	26	2.98	1.29	11.86	0.11
R318	HD:318,350	1,051	17	244	29	1.63	1.67	14.17	0.12
R319	HD:319,341	1,255	20	370	46	1.60	2.29	18.43	0.12
R320	HD:320,333	3,444	74	822	129	2.16	1.73	11.04	0.16
R321	HD:321,331,332	1,808	20	212	29	1.11	1.43	10.57	0.14
R322	HD:322,326,330	2,430	23	80	26	0.94	1.13	3.50	0.32
R323	HD:323,324,325,327	1,739	17	89	26	0.99	1.50	5.17	0.29
R335	HD:335,339,343	2,123	34	341	66	1.62	1.92	9.92	0.19
R340	HD:340	1,530	23	209	29	1.50	1.25	9.12	0.14
R370	HD:370,380	2,524	14	109	17	0.57	1.20	7.60	0.16
R390	HD:390,391,392	2,341	54	779	100	2.33	1.84	14.32	0.13
R399	HD:R3 UNKN	29	0	0	0	0.00	-9.90	-9.90	-9.00
R400	HD:400,401,403,406,415,441	4,263	17	186	29	0.40	1.67	10.83	0.15
R404	HD:404,421,444,450	3,705	20	89	23	0.54	1.14	4.43	0.26
R405	HD:405,447,471	4,071	49	493	54	1.20	1.12	10.12	0.11
R410	HD:410,417,419,426	3,286	37	384	52	1.13	1.38	10.31	0.13
R411	HD:411,412	4,871	135	1,269	203	2.76	1.51	9.43	0.16
R413	HD:413,432	2,914	66	630	92	2.26	1.39	9.57	0.15
R416	HD:416,446,449,452,454	2,137	40	424	60	1.88	1.50	10.57	0.14
R418	HD:418,420,448	1,435	32	183	60	2.20	1.91	5.82	0.33
R422	HD:422,423,424,425,442	1,200	14	69	34	1.19	2.40	4.80	0.50
R445	HD:445,455	1,624	17	123	20	1.06	1.17	7.17	0.16
R499	HD:R4 UNKN	97	0	0	0	0.00	-9.90	-9.90	-9.00

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Additional Lion Observation Statistics
By Lion Regulations/Quota Unit

Location	Lion Regs/Quota Unit HDs	Deer Hunters	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Lions/ Observ	ObsDays /Observ	Lions/ ObsDay
R500	HD:500,570	3,590	32	341	43	0.88	1.36	10.82	0.13
R502	HD:502,575	4,412	29	172	43	0.65	1.50	6.00	0.25
R510	HD:510	854	14	198	20	1.68	1.40	13.80	0.10
R511	HD:511	739	3	17	9	0.39	3.00	6.00	0.50
R520	HD:520	1,908	32	272	46	1.65	1.45	8.64	0.17
R530	HD:530,590	4,596	46	344	69	1.00	1.50	7.50	0.20
R540	HD:540	696	9	29	9	1.23	1.00	3.33	0.30
R560	HD:560	1,046	11	66	14	1.10	1.25	5.75	0.22
R580	HD:580	1,570	26	169	34	1.64	1.33	6.56	0.20
R599	HD:R5 UNKN	86	0	0	0	0.00	-9.90	-9.90	-9.00
R600	HD:600'S (NOT 680,690)	8,291	17	77	20	0.21	1.17	4.50	0.26
R680	HD:680,690	2,318	23	198	26	0.99	1.13	8.62	0.13
R699	HD:R6 UNKN	29	0	0	0	0.00	-9.90	-9.90	-9.00
R700	HD:700'S	13,941	112	868	126	0.80	1.13	7.77	0.15
R799	HD:R7 UNKN	17	0	0	0	0.00	-9.90	-9.90	-9.00
R999	HD:REGION UNKN	309	6	117	20	1.85	3.50	20.50	0.17

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Additional Lion Observation Statistics
By Deer Hunting District

Location	Deer Hunters	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Lions/ Observ	ObsDays /Observ	Lions/ ObsDay
100	2,524	123	1,172	178	4.88	1.44	9.51	0.15
101	2,564	66	713	95	2.57	1.43	10.83	0.13
102	3,275	52	327	60	1.57	1.17	6.33	0.18
103	2,922	63	490	74	2.16	1.18	7.77	0.15
104	1,799	37	390	69	2.07	1.85	10.46	0.18
109	370	3	29	11	0.78	4.00	10.00	0.40
110	1,349	26	301	49	1.91	1.89	11.67	0.16
120	2,246	40	390	49	1.79	1.21	9.71	0.12
121	2,166	63	891	83	2.91	1.32	14.14	0.09
122	1,994	32	266	54	1.58	1.73	8.45	0.20
123	401	9	126	14	2.14	1.67	14.67	0.11
124	381	0	0	0	0.00	-9.90	-9.90	-9.00
130	1,902	46	387	72	2.41	1.56	8.44	0.19
132	1,401	14	143	17	1.02	1.20	10.00	0.12
140	367	3	3	3	0.78	1.00	1.00	1.00
141	155	3	57	11	1.85	4.00	20.00	0.20
150	43	6	9	6	13.33	1.00	1.50	0.67
151	14	0	0	0	0.00	-9.90	-9.90	-9.00
170	616	14	163	14	2.33	1.00	11.40	0.09
199	49	0	0	0	0.00	-9.90	-9.90	-9.00
200	688	26	332	46	3.75	1.78	12.89	0.14
201	2,114	34	261	72	1.63	2.08	7.58	0.27
202	1,636	52	504	100	3.15	1.94	9.78	0.20
203	1,241	46	410	66	3.70	1.44	8.94	0.16
204	1,756	32	350	49	1.79	1.55	11.09	0.14
210	923	20	143	69	2.17	3.43	7.14	0.48
211	238	9	189	9	3.61	1.00	22.00	0.05
212	1,246	23	158	29	1.84	1.25	6.87	0.18
213	298	3	17	3	0.96	1.00	6.00	0.17
214	324	3	9	3	0.88	1.00	3.00	0.33
215	713	14	163	32	2.01	2.20	11.40	0.19
216	309	6	120	6	1.85	1.00	21.00	0.05
240	2,292	23	221	34	1.00	1.50	9.62	0.16
250	1,232	29	218	32	2.33	1.10	7.60	0.14
260	1,430	20	335	20	1.40	1.00	16.71	0.06
261	908	11	100	11	1.26	1.00	8.75	0.11
270	2,083	43	261	77	2.06	1.80	6.07	0.30
280	112	3	3	3	2.56	1.00	1.00	1.00
281	1,057	23	169	37	2.17	1.63	7.37	0.22
282	203	3	52	6	1.41	2.00	18.00	0.11
283	1,289	32	278	43	2.44	1.36	8.82	0.15
284	172	0	0	0	0.00	-9.90	-9.90	-9.00
285	2,220	37	266	63	1.68	1.69	7.15	0.24
290	178	3	17	6	1.61	2.00	6.00	0.33
291	507	6	43	9	1.13	1.50	7.50	0.20
292	1,983	52	828	103	2.60	2.00	16.06	0.12
293	819	11	83	11	1.40	1.00	7.25	0.14
299	54	3	3	9	5.26	3.00	1.00	3.00
300	341	6	29	11	1.68	2.00	5.00	0.40
301	986	23	309	29	2.33	1.25	13.50	0.09
302	347	3	20	3	0.83	1.00	7.00	0.14
310	195	0	0	0	0.00	-9.90	-9.90	-9.00
311	2,066	20	172	23	0.97	1.14	8.57	0.13
312	1,943	20	341	29	1.03	1.43	17.00	0.08
313	430	3	3	3	0.67	1.00	1.00	1.00
314	880	14	86	23	1.63	1.60	6.00	0.27
315	1,931	34	284	60	1.78	1.75	8.25	0.21
316	11	0	0	0	0.00	-9.90	-9.90	-9.00
317	673	20	238	26	2.98	1.29	11.86	0.11
318	524	3	43	3	0.55	1.00	15.00	0.07
319	825	3	103	3	0.35	1.00	36.00	0.03
320	1,364	34	415	77	2.52	2.25	12.08	0.19

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Additional Lion Observation Statistics
By Deer Hunting District

Location	Deer Hunters	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Lions/ Observ	ObsDays /Observ	Lions/ ObsDay
321	350	3	40	3	0.82	1.00	14.00	0.07
322	1,232	20	63	20	1.63	1.00	3.14	0.32
323	229	3	14	9	1.25	3.00	5.00	0.60
324	504	9	52	11	1.70	1.33	6.00	0.22
325	908	6	23	6	0.63	1.00	4.00	0.25
326	768	0	0	0	0.00	-9.90	-9.90	-9.00
327	192	0	0	0	0.00	-9.90	-9.90	-9.00
328	235	0	0	0	0.00	-9.90	-9.90	-9.00
329	510	6	29	6	1.12	1.00	5.00	0.20
330	536	3	17	6	0.53	2.00	6.00	0.33
331	1,166	11	129	20	0.98	1.75	11.25	0.16
332	358	6	43	6	1.60	1.00	7.50	0.13
333	2,140	40	407	52	1.87	1.29	10.14	0.13
335	607	14	115	20	2.36	1.40	8.00	0.17
339	742	3	29	3	0.39	1.00	10.00	0.10
340	1,530	23	209	29	1.50	1.25	9.12	0.14
341	496	17	266	43	3.47	2.50	15.50	0.16
343	825	17	198	43	2.08	2.50	11.50	0.22
350	579	14	201	26	2.48	1.80	14.00	0.13
360	625	3	3	3	0.46	1.00	1.00	1.00
361	103	3	172	9	2.78	3.00	60.00	0.05
362	138	3	32	3	2.08	1.00	11.00	0.09
370	347	3	11	6	0.83	2.00	4.00	0.50
380	2,206	11	97	11	0.52	1.00	8.50	0.12
390	264	3	63	3	1.09	1.00	22.00	0.05
391	888	11	126	20	1.29	1.75	11.00	0.16
392	1,258	40	590	77	3.19	1.93	14.71	0.13
393	1,149	11	112	29	1.00	2.50	9.75	0.26
399	29	0	0	0	0.00	-9.90	-9.90	-9.00
400	1,521	6	120	17	0.38	3.00	21.00	0.14
401	1,418	9	52	9	0.61	1.00	6.00	0.17
403	269	0	0	0	0.00	-9.90	-9.90	-9.00
404	2,444	11	54	11	0.47	1.00	4.75	0.21
405	1,180	9	9	9	0.73	1.00	1.00	1.00
406	748	3	14	3	0.38	1.00	5.00	0.20
410	1,077	9	17	9	0.80	1.00	2.00	0.50
411	3,103	95	914	135	3.05	1.42	9.67	0.15
412	2,117	43	355	69	2.03	1.60	8.27	0.19
413	1,865	40	301	43	2.15	1.07	7.50	0.14
415	92	0	0	0	0.00	-9.90	-9.90	-9.00
416	819	17	178	17	2.10	1.00	10.33	0.10
417	745	11	261	23	1.54	2.00	22.75	0.09
418	725	11	63	26	1.58	2.25	5.50	0.41
419	582	11	69	14	1.97	1.25	6.00	0.21
420	186	3	3	3	1.54	1.00	1.00	1.00
421	539	0	0	0	0.00	-9.90	-9.90	-9.00
422	266	3	17	14	1.08	5.00	6.00	0.83
423	312	3	6	3	0.92	1.00	2.00	0.50
424	261	0	0	0	0.00	-9.90	-9.90	-9.00
425	172	0	0	0	0.00	-9.90	-9.90	-9.00
426	997	6	37	6	0.57	1.00	6.50	0.15
432	1,198	26	329	49	2.15	1.89	12.78	0.15
441	593	0	0	0	0.00	-9.90	-9.90	-9.00
442	255	9	46	17	3.37	2.00	5.33	0.38
444	441	0	0	0	0.00	-9.90	-9.90	-9.00
445	1,533	17	123	20	1.12	1.17	7.17	0.16
446	410	6	97	14	1.40	2.50	17.00	0.15
447	2,218	37	481	43	1.68	1.15	12.92	0.09
448	645	20	117	32	3.11	1.57	5.86	0.27
449	441	0	0	0	0.00	-9.90	-9.90	-9.00

Montana Fish Wildlife and Parks
2002 Mountain Lion Sightings while Deer Hunting (MT Residents)
Additional Lion Observation Statistics
By Deer Hunting District

Location	Deer Hunters	Hunter Observ	Observ Days	Lions Seen	Percent Observ	Lions/ Observ	ObsDays /Observ	Lions/ ObsDay
450	418	9	34	11	2.05	1.33	4.00	0.33
452	221	6	23	11	2.60	2.00	4.00	0.50
454	430	11	126	17	2.67	1.50	11.00	0.14
455	92	0	0	0	0.00	-9.90	-9.90	-9.00
471	888	3	3	3	0.32	1.00	1.00	1.00
499	97	0	0	0	0.00	-9.90	-9.90	-9.00
500	1,997	20	292	29	1.00	1.43	14.57	0.10
502	1,656	9	49	9	0.52	1.00	5.67	0.18
510	854	14	198	20	1.68	1.40	13.80	0.10
511	739	3	17	9	0.39	3.00	6.00	0.50
520	1,908	32	272	46	1.65	1.45	8.64	0.17
530	1,604	23	195	34	1.43	1.50	8.50	0.18
540	696	9	29	9	1.23	1.00	3.33	0.30
560	1,046	11	66	14	1.10	1.25	5.75	0.22
570	1,650	11	49	14	0.69	1.25	4.25	0.29
575	2,934	20	123	34	0.68	1.71	6.14	0.28
580	1,570	26	169	34	1.64	1.33	6.56	0.20
590	3,120	23	149	34	0.73	1.50	6.50	0.23
599	86	0	0	0	0.00	-9.90	-9.90	-9.00
600	1,097	0	0	0	0.00	-9.90	-9.90	-9.00
610	602	3	3	3	0.48	1.00	1.00	1.00
611	458	3	3	3	0.63	1.00	1.00	1.00
620	828	0	0	0	0.00	-9.90	-9.90	-9.00
621	444	9	57	9	1.94	1.00	6.67	0.15
622	206	3	14	6	1.39	2.00	5.00	0.40
630	1,046	0	0	0	0.00	-9.90	-9.90	-9.00
631	163	0	0	0	0.00	-9.90	-9.90	-9.00
632	195	0	0	0	0.00	-9.90	-9.90	-9.00
640	1,163	0	0	0	0.00	-9.90	-9.90	-9.00
641	284	0	0	0	0.00	-9.90	-9.90	-9.00
650	923	0	0	0	0.00	-9.90	-9.90	-9.00
651	848	0	0	0	0.00	-9.90	-9.90	-9.00
652	186	0	0	0	0.00	-9.90	-9.90	-9.00
670	765	0	0	0	0.00	-9.90	-9.90	-9.00
680	484	3	60	6	0.59	2.00	21.00	0.10
690	1,891	20	138	20	1.06	1.00	6.86	0.15
699	29	0	0	0	0.00	-9.90	-9.90	-9.00
700	2,412	17	135	17	0.71	1.00	7.83	0.13
701	2,851	23	329	29	0.80	1.25	14.38	0.09
702	1,914	37	186	40	1.95	1.08	5.00	0.22
703	2,710	0	0	0	0.00	-9.90	-9.90	-9.00
704	2,877	32	189	37	1.10	1.18	6.00	0.20
705	2,229	3	29	3	0.13	1.00	10.00	0.10
799	17	0	0	0	0.00	-9.90	-9.90	-9.00
999	309	6	117	20	1.85	3.50	20.50	0.17

Appendix A

2002 Mountain Lion Management Areas, Regulations/Quota Units, and Hunting Districts

Tue Oct 28 page 1

2002 Mountain Lion Hunting Districts Table, Sorted by Region-MgmtArea

Region	Mgmt Area	Mgmt Area Name	Hunting District	Regs Unit	Regs Unit Name
1	M1A	CABINET-YAAK	100	R100	HD:100
			104	R104	HD:104
	M1B	CLARK FORK	121	R121	HD:121
			123	R123	HD:123
			124	R124	HD:124
	M1C	SALISH	101	R101	HD:101,109
			102	R102	HD:102
			103	R103	HD:103
			109	R101	HD:101,109
			120	R120	HD:120
			122	R122	HD:122
	M1D	BOB MARSHALL-MISSIONS	130	R130	HD:130
			132	R132	HD:132,170
			140	R140	HD:140
			141	R141	HD:141
			150	R150	HD:150,151
			151	R150	HD:150,151
	M1E	WHITEFISH	110	R110	HD:110
	M1F	URBAN	170	R132	HD:132,170
	M1U	REGION 1 UNKNOWN	199	R199	HD:R1 UNKN
2	M2A	LOWER CLARK FORK	200	R200	HD:200,201
			201	R200	HD:200,201
			202	R202	HD:202,203
			203	R202	HD:202,203
	M2B	BITTERROOT	204	R204	HD:204,260,261
			240	R240	HD:240
			250	R250	HD:250
			260	R204	HD:204,260,261
			261	R204	HD:204,260,261
			270	R270	HD:270
	M2C	ROCK CR-DEERLODGE	210	R210	HD:210,211,216
			211	R210	HD:210,211,216
			212	R212	HD:212,215
			213	R213	HD:213,214
			214	R213	HD:213,214
			215	R212	HD:212,215
			216	R210	HD:210,211,216
	M2D	BLACKFOOT	280	R280	HD:280,281,284,293
			281	R280	HD:280,281,284,293
			282	R282	HD:282
			283	R283	HD:283,285
			284	R280	HD:280,281,284,293
			285	R283	HD:283,285
			290	R290	HD:290,291,292
			291	R290	HD:290,291,292
			292	R290	HD:290,291,292
			293	R280	HD:280,281,284,293
	M2U	REGION 2 UNKNOWN	299	R299	HD:R2 UNKN

2002 Mountain Lion Hunting Districts Table, Sorted by Region-MgmtArea

Region	Mgmt Area	Mgmt Area Name	Hunting District	Regs Unit	Regs Unit Name
3	M3A	BIGHOLE	319	R319	HD:319,341
			321	R321	HD:321,331,332
			331	R321	HD:321,331,332
			332	R321	HD:321,331,332
			340	R340	HD:340
			341	R319	HD:319,341
	M3B	GRAVELLYS-PIONEERS	300	R300	HD:300,302,328,329
			302	R300	HD:300,302,328,329
			320	R320	HD:320,333
			322	R322	HD:322,326,330
			323	R323	HD:323,324,325,327
			324	R323	HD:323,324,325,327
			325	R323	HD:323,324,325,327
			326	R322	HD:322,326,330
			327	R323	HD:323,324,325,327
			328	R300	HD:300,302,328,329
			329	R300	HD:300,302,328,329
			330	R322	HD:322,326,330
			333	R320	HD:320,333
	M3C	YELLOWSTONE	301	R301	HD:301
			310	R310	HD:310,311,360,361,362
			311	R310	HD:310,311,360,361,362
			313	R313	HD:313,316
			314	R314	HD:314
			316	R313	HD:313,316
			317	R317	HD:317
			360	R310	HD:310,311,360,361,362
			361	R310	HD:310,311,360,361,362
			362	R310	HD:310,311,360,361,362
	M3D	BELTS-BRIDGERS-ELKHORNS	312	R312	HD:312,393
			315	R315	HD:315
			318	R318	HD:318,350
			335	R335	HD:335,339,343
			339	R335	HD:335,339,343
			343	R335	HD:335,339,343
			350	R318	HD:318,350
			370	R370	HD:370,380
			380	R370	HD:370,380
			390	R390	HD:390,391,392
			391	R390	HD:390,391,392
			392	R390	HD:390,391,392
			393	R312	HD:312,393
	M3U	REGION 3 UNKNOWN	399	R399	HD:R3 UNKN
4	M4A	EAST FRONT	415	R400	HD:400,401,403,406,415,441
			421	R404	HD:404,421,444,450
			422	R422	HD:422,423,424,425,442
			423	R422	HD:422,423,424,425,442
			424	R422	HD:422,423,424,425,442
			425	R422	HD:422,423,424,425,442
			441	R400	HD:400,401,403,406,415,441
			442	R422	HD:422,423,424,425,442
			444	R404	HD:404,421,444,450
			450	R404	HD:404,421,444,450

2002 Mountain Lion Hunting Districts Table, Sorted by Region-MgmtArea

Region	Mgmt Area	Mgmt Area Name	Hunting District	Regs Unit	Regs Unit Name
4	M4B	MOUNTAIN-FOOTHILLS	411	R411	HD:411,412
			412	R411	HD:411,412
			413	R413	HD:413,432
			416	R416	HD:416,446,449,452,454
			418	R418	HD:418,420,448
			420	R418	HD:418,420,448
			432	R413	HD:413,432
			445	R445	HD:445,455
			446	R416	HD:416,446,449,452,454
			448	R418	HD:418,420,448
			449	R416	HD:416,446,449,452,454
			452	R416	HD:416,446,449,452,454
			454	R416	HD:416,446,449,452,454
			455	R445	HD:445,455
	M4C	PRAIRE-AGRICULTURE	400	R400	HD:400,401,403,406,415,441
			401	R400	HD:400,401,403,406,415,441
			403	R400	HD:400,401,403,406,415,441
			404	R404	HD:404,421,444,450
			405	R405	HD:405,447,471
			406	R400	HD:400,401,403,406,415,441
			410	R410	HD:410,417,419,426
			417	R410	HD:410,417,419,426
			419	R410	HD:410,417,419,426
			426	R410	HD:410,417,419,426
			447	R405	HD:405,447,471
			471	R405	HD:405,447,471
	M4U	REGION 4 UNKNOWN	499	R499	HD:R4 UNKN
5	M5A	BEARTOOTH FACE	520	R520	HD:520
			560	R560	HD:560
	M5B	MOUNTAIN FOOTHILLS	510	R510	HD:510
			511	R511	HD:511
			540	R540	HD:540
			580	R580	HD:580
	M5C	PRAIRE-AGRICULTURE	500	R500	HD:500,570
			502	R502	HD:502,575
			530	R530	HD:530,590
			570	R500	HD:500,570
			575	R502	HD:502,575
			590	R530	HD:530,590
	M5U	REGION 5 UNKNOWN	599	R599	HD:R5 UNKN
6	M6A	REGION 6 DISTRICTS	600	R600	HD:600'S (NOT 680,690)
			610	R600	HD:600'S (NOT 680,690)
			611	R600	HD:600'S (NOT 680,690)
			620	R600	HD:600'S (NOT 680,690)
			621	R600	HD:600'S (NOT 680,690)
			622	R600	HD:600'S (NOT 680,690)
			630	R600	HD:600'S (NOT 680,690)
			631	R600	HD:600'S (NOT 680,690)
			632	R600	HD:600'S (NOT 680,690)
			640	R600	HD:600'S (NOT 680,690)
			641	R600	HD:600'S (NOT 680,690)
			650	R600	HD:600'S (NOT 680,690)
			651	R600	HD:600'S (NOT 680,690)
			652	R600	HD:600'S (NOT 680,690)
			670	R600	HD:600'S (NOT 680,690)
			680	R680	HD:680,690
			690	R680	HD:680,690
	M6U	REGION 6 UNKNOWN	699	R699	HD:R6 UNKN

Tue Oct 28 page 4

2002 Mountain Lion Hunting Districts Table, Sorted by Region-MgmtArea

Region	Mgmt Area	Mgmt Area Name	Hunting District	Regs Unit	Regs Unit Name
7	M7A	REGION 7 DISTRICTS	700	R700	HD:700'S
			701	R700	HD:700'S
			702	R700	HD:700'S
			703	R700	HD:700'S
			704	R700	HD:700'S
			705	R700	HD:700'S
	M7U	REGION 7 UNKNOWN	799	R799	HD:R7 UNKN
9	M9U	REGION UNKNOWN	999	R999	HD:REGION UNKN

Appendix B

2002 Mountain Lion Sightings Survey Response Data Non-Expanded Summary Statistics

State and Regional
By Lion Management Area
By Lion Regulations/Quota Unit
By Hunting District

2002 Deer Hunter-Mountain Lion Sighting Survey
Response Data Summary Non-expanded Statistics

Location	Responding Hunters	District Hunted	Hunter Days	Hunter Observ	Distric Observ	Observ Days	Lions Seen	Percent Observ
STA	43,428	57,975	306,468	814	845	8,094	1,278	1.87
R01	7,081	9,263	57,228	196	209	2,044	300	2.77
R02	7,427	9,782	63,188	193	197	1,931	330	2.60
R03	9,573	11,667	66,087	161	163	1,774	262	1.68
R04	9,006	10,931	48,001	147	151	1,344	219	1.63
R05	6,101	6,932	28,044	67	70	561	100	1.10
R06	3,605	4,053	19,067	14	14	96	16	0.39
R07	4,872	5,239	24,438	39	39	303	44	0.80
R09	108	108	415	2	2	41	7	1.85
M1A	1,329	1,509	9,587	53	56	545	86	3.99
M1B	989	1,029	8,131	24	25	355	34	2.43
M1C	4,066	4,667	27,431	88	89	773	120	2.16
M1D	1,256	1,355	7,845	25	25	209	38	1.99
M1E	471	471	2,726	9	9	105	17	1.91
M1F	215	215	1,386	5	5	57	5	2.33
M1U	17	17	122	0	0	0	0	0.00
M2A	1,684	1,982	12,398	53	55	526	99	3.15
M2B	2,758	3,386	23,012	55	55	518	78	1.99
M2C	1,236	1,414	9,571	27	27	279	52	2.18
M2D	2,593	2,981	18,085	59	59	607	98	2.28
M2U	19	19	122	1	1	1	3	5.26
M3A	1,493	1,649	11,179	22	22	276	36	1.47
M3B	2,918	3,248	17,054	45	45	373	70	1.54
M3C	1,911	2,131	10,779	31	31	354	41	1.62
M3D	4,238	4,629	27,048	65	65	771	115	1.53
M3U	10	10	27	0	0	0	0	0.00
M4A	1,088	1,169	4,934	8	8	36	16	0.74
M4B	4,227	4,811	22,516	100	103	918	152	2.37
M4C	4,506	4,917	20,373	40	40	390	51	0.89
M4U	34	34	178	0	0	0	0	0.00
M5A	1,021	1,031	4,557	15	15	118	21	1.47
M5B	1,307	1,347	5,600	18	18	144	25	1.38
M5C	4,188	4,524	17,805	37	37	299	54	0.88
M5U	30	30	82	0	0	0	0	0.00
M6A	3,596	4,043	19,017	14	14	96	16	0.39
M6U	10	10	50	0	0	0	0	0.00
M7A	4,866	5,233	24,417	39	39	303	44	0.80
M7U	6	6	21	0	0	0	0	0.00
M9U	108	108	415	2	2	41	7	1.85
R100	881	881	5,537	43	43	409	62	4.88
R101	1,002	1,024	6,291	24	24	259	37	2.40
R102	1,143	1,143	6,166	18	18	114	21	1.57
R103	1,020	1,020	6,325	22	22	171	26	2.16
R104	628	628	4,050	13	13	136	24	2.07
R110	471	471	2,726	9	9	105	17	1.91
R120	784	784	4,226	14	14	136	17	1.79
R121	756	756	6,049	22	22	311	29	2.91
R122	696	696	4,423	11	11	93	19	1.58
R123	140	140	874	3	3	44	5	2.14
R124	133	133	1,208	0	0	0	0	0.00
R130	664	664	3,361	16	16	135	25	2.41
R132	689	704	4,593	10	10	107	11	1.45
R140	128	128	823	1	1	1	1	0.78
R141	54	54	307	1	1	20	4	1.85
R150	20	20	147	2	2	3	2	10.00
R199	17	17	122	0	0	0	0	0.00

2002 Deer Hunter-Mountain Lion Sighting Survey
Response Data Summary Non-expanded Statistics

Location	Responding Hunters	District Hunted	Hunter Days	Hunter Observ	Distric Observ	Observ Days	Lions Seen	Percent Observ
R200	943	978	6,162	21	21	207	41	2.23
R202	952	1,004	6,236	33	34	319	58	3.47
R204	1,334	1,429	10,532	22	22	274	28	1.65
R210	477	513	3,375	12	12	158	29	2.52
R212	657	684	4,961	13	13	112	21	1.98
R213	199	217	1,235	2	2	9	2	1.01
R240	800	800	5,018	8	8	77	12	1.00
R250	430	430	3,090	10	10	76	11	2.33
R270	727	727	4,372	15	15	91	27	2.06
R280	689	754	4,808	13	13	89	18	1.89
R282	71	71	327	1	1	18	2	1.41
R283	1,160	1,225	6,740	24	24	190	37	2.07
R290	911	931	6,210	21	21	310	41	2.31
R299	19	19	122	1	1	1	3	5.26
R300	456	500	2,753	5	5	27	7	1.10
R301	344	344	1,989	8	8	108	10	2.33
R310	1,050	1,091	5,537	10	10	132	13	0.95
R312	1,035	1,079	5,963	11	11	158	20	1.06
R313	154	154	599	1	1	1	1	0.65
R314	307	307	1,542	5	5	30	8	1.63
R315	674	674	2,988	12	12	99	21	1.78
R317	235	235	1,112	7	7	83	9	2.98
R318	367	385	2,680	6	6	85	10	1.63
R319	438	461	3,616	7	7	129	16	1.60
R320	1,202	1,223	6,663	26	26	287	45	2.16
R321	631	654	4,268	7	7	74	10	1.11
R322	848	885	4,079	8	8	28	9	0.94
R323	607	640	3,559	6	6	31	9	0.99
R335	741	759	5,008	12	12	119	23	1.62
R340	534	534	3,295	8	8	73	10	1.50
R370	881	891	5,349	5	5	38	6	0.57
R390	817	841	5,060	19	19	272	35	2.33
R399	10	10	27	0	0	0	0	0.00
R400	1,488	1,620	6,802	6	6	65	10	0.40
R404	1,293	1,341	5,691	7	7	31	8	0.54
R405	1,421	1,496	5,872	17	17	172	19	1.20
R410	1,147	1,187	4,991	13	13	134	18	1.13
R411	1,700	1,822	8,762	47	48	443	71	2.76
R413	1,017	1,069	4,698	23	23	220	32	2.26
R416	746	810	4,132	14	14	148	21	1.88
R418	501	543	2,852	11	12	64	21	2.20
R422	419	442	1,951	5	5	24	12	1.19
R445	567	567	2,072	6	6	43	7	1.06
R499	34	34	178	0	0	0	0	0.00
R500	1,253	1,273	4,519	11	11	119	15	0.88
R502	1,540	1,602	6,319	10	10	60	15	0.65
R510	298	298	1,525	5	5	69	7	1.68
R511	258	258	951	1	1	6	3	0.39
R520	666	666	3,173	11	11	95	16	1.65
R530	1,604	1,649	6,967	16	16	120	24	1.00
R540	243	243	1,170	3	3	10	3	1.23
R560	365	365	1,384	4	4	23	5	1.10
R580	548	548	1,954	9	9	59	12	1.64
R599	30	30	82	0	0	0	0	0.00
R600	2,894	3,214	15,270	6	6	27	7	0.21
R680	809	829	3,747	8	8	69	9	0.99
R699	10	10	50	0	0	0	0	0.00
R700	4,866	5,233	24,417	39	39	303	44	0.80
R799	6	6	21	0	0	0	0	0.00
R999	108	108	415	2	2	41	7	1.85

2002 Deer Hunter-Mountain Lion Sighting Survey
Response Data Summary Non-expanded Statistics

Location	Responding Hunters	District Hunted	Hunter Days	Hunter Observ	Distric Observ	Observ Days	Lions Seen	Percent Observ
100	881	881	5,537	43	43	409	62	4.88
101	895	895	5,632	23	23	249	33	2.57
102	1,143	1,143	6,166	18	18	114	21	1.57
103	1,020	1,020	6,325	22	22	171	26	2.16
104	628	628	4,050	13	13	136	24	2.07
109	129	129	659	1	1	10	4	0.78
110	471	471	2,726	9	9	105	17	1.91
120	784	784	4,226	14	14	136	17	1.79
121	756	756	6,049	22	22	311	29	2.91
122	696	696	4,423	11	11	93	19	1.58
123	140	140	874	3	3	44	5	2.14
124	133	133	1,208	0	0	0	0	0.00
130	664	664	3,361	16	16	135	25	2.41
132	489	489	3,207	5	5	50	6	1.02
140	128	128	823	1	1	1	1	0.78
141	54	54	307	1	1	20	4	1.85
150	15	15	117	2	2	3	2	13.33
151	5	5	30	0	0	0	0	0.00
170	215	215	1,386	5	5	57	5	2.33
199	17	17	122	0	0	0	0	0.00
200	240	240	1,887	9	9	116	16	3.75
201	738	738	4,275	12	12	91	25	1.63
202	571	571	3,834	18	18	176	35	3.15
203	433	433	2,402	16	16	143	23	3.70
204	613	613	3,502	11	11	122	17	1.79
210	322	322	2,007	7	7	50	24	2.17
211	83	83	676	3	3	66	3	3.61
212	435	435	3,243	8	8	55	10	1.84
213	104	104	580	1	1	6	1	0.96
214	113	113	655	1	1	3	1	0.88
215	249	249	1,718	5	5	57	11	2.01
216	108	108	692	2	2	42	2	1.85
240	800	800	5,018	8	8	77	12	1.00
250	430	430	3,090	10	10	76	11	2.33
260	499	499	4,993	7	7	117	7	1.40
261	317	317	2,037	4	4	35	4	1.26
270	727	727	4,372	15	15	91	27	2.06
280	39	39	174	1	1	1	1	2.56
281	369	369	2,546	8	8	59	13	2.17
282	71	71	327	1	1	18	2	1.41
283	450	450	2,464	11	11	97	15	2.44
284	60	60	346	0	0	0	0	0.00
285	775	775	4,276	13	13	93	22	1.68
290	62	62	520	1	1	6	2	1.61
291	177	177	1,027	2	2	15	3	1.13
292	692	692	4,663	18	18	289	36	2.60
293	286	286	1,742	4	4	29	4	1.40
299	19	19	122	1	1	1	3	5.26
300	119	119	635	2	2	10	4	1.68
301	344	344	1,989	8	8	108	10	2.33
302	121	121	638	1	1	7	1	0.83
310	68	68	367	0	0	0	0	0.00
311	721	721	3,494	7	7	60	8	0.97
312	678	678	3,900	7	7	119	10	1.03
313	150	150	581	1	1	1	1	0.67
314	307	307	1,542	5	5	30	8	1.63
315	674	674	2,988	12	12	99	21	1.78
316	4	4	18	0	0	0	0	0.00
317	235	235	1,112	7	7	83	9	2.98
318	183	183	1,405	1	1	15	1	0.55
319	288	288	2,313	1	1	36	1	0.35
320	476	476	2,855	12	12	145	27	2.52
321	122	122	758	1	1	14	1	0.82
322	430	430	1,832	7	7	22	7	1.63
323	80	80	364	1	1	5	3	1.25
324	176	176	1,009	3	3	18	4	1.70

2002 Deer Hunter-Mountain Lion Sighting Survey
Response Data Summary Non-expanded Statistics

Location	Responding Hunters	District Hunted	Hunter Days	Hunter Observ	Distric Observ	Observ Days	Lions Seen	Percent Observ
325	317	317	1,825	2	2	8	2	0.63
326	268	268	1,227	0	0	0	0	0.00
327	67	67	361	0	0	0	0	0.00
328	82	82	470	0	0	0	0	0.00
329	178	178	1,010	2	2	10	2	1.12
330	187	187	1,020	1	1	6	2	0.53
331	407	407	2,815	4	4	45	7	0.98
332	125	125	695	2	2	15	2	1.60
333	747	747	3,808	14	14	142	18	1.87
335	212	212	1,304	5	5	40	7	2.36
339	259	259	1,722	1	1	10	1	0.39
340	534	534	3,295	8	8	73	10	1.50
341	173	173	1,303	6	6	93	15	3.47
343	288	288	1,982	6	6	69	15	2.08
350	202	202	1,275	5	5	70	9	2.48
360	218	218	1,051	1	1	1	1	0.46
361	36	36	325	1	1	60	3	2.78
362	48	48	300	1	1	11	1	2.08
370	121	121	769	1	1	4	2	0.83
380	770	770	4,580	4	4	34	4	0.52
390	92	92	415	1	1	22	1	1.09
391	310	310	1,735	4	4	44	7	1.29
392	439	439	2,910	14	14	206	27	3.19
393	401	401	2,063	4	4	39	10	1.00
399	10	10	27	0	0	0	0	0.00
400	531	531	2,256	2	2	42	6	0.38
401	495	495	2,105	3	3	18	3	0.61
403	94	94	368	0	0	0	0	0.00
404	853	853	3,718	4	4	19	4	0.47
405	412	412	1,293	3	3	3	3	0.73
406	261	261	1,063	1	1	5	1	0.38
410	376	376	1,768	3	3	6	3	0.80
411	1,083	1,083	5,421	33	33	319	47	3.05
412	739	739	3,341	15	15	124	24	2.03
413	651	651	2,713	14	14	105	15	2.15
415	32	32	135	0	0	0	0	0.00
416	286	286	1,445	6	6	62	6	2.10
417	260	260	1,249	4	4	91	8	1.54
418	253	253	1,417	4	4	22	9	1.58
419	203	203	713	4	4	24	5	1.97
420	65	65	277	1	1	1	1	1.54
421	188	188	647	0	0	0	0	0.00
422	93	93	392	1	1	6	5	1.08
423	109	109	480	1	1	2	1	0.92
424	91	91	413	0	0	0	0	0.00
425	60	60	240	0	0	0	0	0.00
426	348	348	1,261	2	2	13	2	0.57
432	418	418	1,985	9	9	115	17	2.15
441	207	207	875	0	0	0	0	0.00
442	89	89	426	3	3	16	6	3.37
444	154	154	588	0	0	0	0	0.00
445	535	535	1,939	6	6	43	7	1.12
446	143	143	760	2	2	34	5	1.40
447	774	774	3,496	13	13	168	15	1.68
448	225	225	1,158	7	7	41	11	3.11
449	154	154	779	0	0	0	0	0.00
450	146	146	738	3	3	12	4	2.05
452	77	77	339	2	2	8	4	2.60
454	150	150	809	4	4	44	6	2.67
455	32	32	133	0	0	0	0	0.00
471	310	310	1,083	1	1	1	1	0.32
499	34	34	178	0	0	0	0	0.00

2002 Deer Hunter-Mountain Lion Sighting Survey
Response Data Summary Non-expanded Statistics

Location	Responding Hunters	District Hunted	Hunter Days	Hunter Observ	Distric Observ	Observ Days	Lions Seen	Percent Observ
500	697	697	2,530	7	7	102	10	1.00
502	578	578	2,365	3	3	17	3	0.52
510	298	298	1,525	5	5	69	7	1.68
511	258	258	951	1	1	6	3	0.39
520	666	666	3,173	11	11	95	16	1.65
530	560	560	2,223	8	8	68	12	1.43
540	243	243	1,170	3	3	10	3	1.23
560	365	365	1,384	4	4	23	5	1.10
570	576	576	1,989	4	4	17	5	0.69
575	1,024	1,024	3,954	7	7	43	12	0.68
580	548	548	1,954	9	9	59	12	1.64
590	1,089	1,089	4,744	8	8	52	12	0.73
599	30	30	82	0	0	0	0	0.00
600	383	383	1,815	0	0	0	0	0.00
610	210	210	942	1	1	1	1	0.48
611	160	160	571	1	1	1	1	0.63
620	289	289	1,129	0	0	0	0	0.00
621	155	155	886	3	3	20	3	1.94
622	72	72	349	1	1	5	2	1.39
630	365	365	2,017	0	0	0	0	0.00
631	57	57	264	0	0	0	0	0.00
632	68	68	313	0	0	0	0	0.00
640	406	406	2,182	0	0	0	0	0.00
641	99	99	498	0	0	0	0	0.00
650	322	322	1,319	0	0	0	0	0.00
651	296	296	1,547	0	0	0	0	0.00
652	65	65	242	0	0	0	0	0.00
670	267	267	1,196	0	0	0	0	0.00
680	169	169	727	1	1	21	2	0.59
690	660	660	3,020	7	7	48	7	1.06
699	10	10	50	0	0	0	0	0.00
700	842	842	3,717	6	6	47	6	0.71
701	995	995	3,963	8	8	115	10	0.80
702	668	668	2,944	13	13	65	14	1.95
703	946	946	5,579	0	0	0	0	0.00
704	1,004	1,004	4,639	11	11	66	13	1.10
705	778	778	3,575	1	1	10	1	0.13
799	6	6	21	0	0	0	0	0.00
999	108	108	415	2	2	41	7	1.85

Appendix C

2002 Mountain Lion Sightings
Statistical Estimates
Data File Description

Mountain Lion Sightings While Deer Hunting

Description of Data File of Statistical Estimates

License Year 2002

Montana Fish Wildlife and Parks

Harvest Surveys

October 28, 2003

This document contains a description of the License Year 2002 "Mountain Lion Sightings While Deer Hunting" data file of expanded statistical estimates. This file was exported from the original Oracle data tables used to produce the **2002 Mountain Lion Sightings Report**. An additional data file defines Mountain Lion Management Areas and Regulation/Quota Units by Hunting District. The data sets are distributed in **Comma Separated Value ASCII text files** where character values are quoted and numeric values are not. Numeric values were exported to 2 decimal places. Undefined or otherwise null numeric values are flagged as –9.9. Headers are not included. The data files have the extension ***.Csv**. They are accompanied by ***.sch** files which define the file format and column types. This documentation appears as Appendix C of the 2002 report, and as a stand alone Rich Text Format (rtf) document distributed with the data set (**2002MLionObsStatsData.Rtf**). Descriptions and column definitions for the data file are given below:

DmHu02_031028.Csv – LY2002 Table of Lion Sightings by Deer Hunters Statistics (generated 10/28/2003)

- **Loc (Location)**: **STA**=Statewide; **R01..R07,R09**=Regional 1..7,Unknown; **M1A..M9U**=Management Area; **R100..R900**=Regs/Quota Unit; ###=Hunting District (100,101,…), #99=Unknown District within Region. 999=Unknown District and Region. (See included **DmHDist02.Csv** table for Lion Districts, Mgmt Areas, and Regs/Quota Units.)
- **Sort_Loc**: Variable which assists in sorting the records by Location.
- **Exp_Fact (Expansion Factor)**: Number by which survey response summary statistics were expanded to statistical estimates. Number of resident active deer hunters divided by number of valid responses used in analysis from resident active deer hunters.
- **Hunt (Hunters)**: Point estimate of number of resident sportspersons actively hunting deer.
- **Hunt_L (Hunters Lower Bound)**: Lower 80% confidence bound on active deer hunters.
- **Hunt_U (Hunters Upper Bound)**: Upper 80% confidence bound on active deer hunters.
- **DistHunt (Districts Hunted)**: Sum of number of districts reported used by all active deer hunters.
- **HDays (Hunter Days)**: Sum of number of days or partial days spent hunting deer by all hunters.
- **HDays_L (Hunter Days Lower Bound)**: Lower 80% confidence bound on hunter days.
- **HDays_U (Hunter Days Upper Bound)**: Upper 80% confidence bound on hunter days.
- **Obs (Lion Observers)**: Point estimate of number of resident active deer hunters observing a lion.
- **Obs_L (Obs Lower Bound)**: Lower 80% confidence bound on lion observers.
- **Obs_U (Obs Upper Bound)**: Upper 80% confidence bound on lion observers.
- **ODays (Observation Days)**: Sum of deer hunter days for hunts where lion was observed.
- **ODays_L (ODays Lower Bound)**: Lower 80% confidence bound on observation days.
- **ODays_U (ODays Upper Bound)**: Upper 80% confidence bound on observation days.
- **ObsN (Lions Seen)**: Point estimate of number of lion seen by lion observers.
- **ObsN_L (ObsN Lower Bound)**: Lower 80% confidence bound on lions seen.
- **ObsN_U (ObsN Upper Bound)**: Upper 80% confidence bound on lions seen.
- **PctObs (Percent Observers)**: Percent of resident active deer hunters observing a lion.

Various meaningful ratios and percents further describing mountain lion sightings by deer hunters can be computed based on these provided statistics. Please refer to the **2002 Mountain Lion Sightings Report** for definitions of these ratios and percents and examples of their use.

DmHDist02.Csv – LY2002 Table of Lion Hunting Districts, Regions, Management Areas, & Regulations Units

- **HDist**: Mountain Lion Hunting District. Same as Deer hunting district.
- **Region**: FWP Administrative Region of district.
- **MgmtArea**: Mountain Lion Management Area of District.
- **MgmtArea_Name**: Descriptive name of Mountain Lion Management Area.
- **RegsUnit**: Mountain Lion Regulations/Quota Unit of District.
- **MgmtArea_Name**: Descriptive name of Mountain Lion Regulations/Quota Unit.

2002 DEER

Our records show that you were issued a license to hunt deer in Montana in 2002. The license(s) issued are shown on the address label below. Please record **ALL** of your **OWN** deer rifle and archery hunting activity in Montana, regardless of your license type, during the past 2002 deer hunting season (Sept. 1, 2002 - Feb. 28, 2003). The information you provide will be used for management purposes. Thank you.

PLEASE COMPLETE ALL SECTIONS THAT APPLY IN INK

1. Did you HUNT DEER in Montana in 2002? ..... ○1 NO ○2 YES

2. List up to 3 hunting districts hunted most for deer and total days hunted in each; for all of your own deer rifle and archery hunting activity. (see map for 3 digit hunting district numbers).....

Hunting District Number	No. Days

3. How many deer did you kill in the 2002 Montana deer hunting season? .....

Please complete the following sections for each deer killed (up to three) during license year 2002.

DEER NO. 1

4. In which hunting district did you kill this deer in 2002? ..... HUNTING DISTRICT
5. Deer killed was a: ..... ○1 MULE DEER ○2 WHITE-TAILED DEER
6. Deer killed was a: ..... ○1 FAWN ○2 ADULT DOE ○3 ADULT BUCK
7. a) If a Buck, was the total antler length: ..... ○1 LESS THAN 4" ○2 MORE THAN 4"

   b) If total antler length is **more than 4"**, how many POINTS ON EACH SIDE? ..... Antler Points (Side 1) X (Side 2)
   (Antler points are antler points 1" long or longer.)
   Mule Deer: Do NOT include Brow-tines as antler points
   White-tail Deer: Include Brow-tines as antler points
8. Deer was killed during which time period? ○1 Before Oct 27

   ○2 Oct 27 - Nov 3 *(First week)* ○3 Nov 4 - Nov 10 *(Second week)* ○4 Nov 11 - 17 *(Third week)* ○5 Nov 18 - 24 *(Fourth week)* ○6 Nov 25 - Dec 1 *(Fifth week)* ○7 After Dec 1
9. Please describe the specific location of kill (geographic landmark and/or Block Management Area) if the kill was made in any of the following hunting districts: 100, 292, 312, 326, 405, 418, 530, 575, 670, 690, 701, 704:

_____

DEER NO. 2

4. In which hunting district did you kill this deer in 2002? ..... HUNTING DISTRICT
5. Deer killed was a: ..... ○1 MULE DEER ○2 WHITE-TAILED DEER
6. Deer killed was a: ..... ○1 FAWN ○2 ADULT DOE ○3 ADULT BUCK
7. a) If a Buck, was the total antler length: ..... ○1 LESS THAN 4" ○2 MORE THAN 4"

   b) If total antler length is **more than 4"**, how many POINTS ON EACH SIDE? ..... Antler Points (Side 1) X (Side 2)
   (Antler points are antler points 1" long or longer.)
   Mule Deer: Do NOT include Brow-tines as antler points
   White-tail Deer: Include Brow-tines as antler points
8. Deer was killed during which time period? ○1 Before Oct 27

   ○2 Oct 27 - Nov 3 *(First week)* ○3 Nov 4 - Nov 10 *(Second week)* ○4 Nov 11 - 17 *(Third week)* ○5 Nov 18 - 24 *(Fourth week)* ○6 Nov 25 - Dec 1 *(Fifth week)* ○7 After Dec 1
9. Please describe the specific location of kill (geographic landmark and/or Block Management Area) if the kill was made in any of the following hunting districts: 100, 292, 312, 326, 405, 418, 530, 575, 670, 690, 701, 704:

_____

DEER NO. 3

4. In which hunting district did you kill this deer in 2002? ..... HUNTING DISTRICT
5. Deer killed was a: ..... ○1 MULE DEER ○2 WHITE-TAILED DEER
6. Deer killed was a: ..... ○1 FAWN ○2 ADULT DOE ○3 ADULT BUCK
7. a) If a Buck, was the total antler length: ..... ○1 LESS THAN 4" ○2 MORE THAN 4"

   b) If total antler length is **more than 4"**, how many POINTS ON EACH SIDE? ..... Antler Points (Side 1) X (Side 2)
   (Antler points are antler points 1" long or longer.)
   Mule Deer: Do NOT include Brow-tines as antler points
   White-tail Deer: Include Brow-tines as antler points
8. Deer was killed during which time period? ○1 Before Oct 27

   ○2 Oct 27 - Nov 3 *(First week)* ○3 Nov 4 - Nov 10 *(Second week)* ○4 Nov 11 - 17 *(Third week)* ○5 Nov 18 - 24 *(Fourth week)* ○6 Nov 25 - Dec 1 *(Fifth week)* ○7 After Dec 1
9. Please describe the specific location of kill (geographic landmark and/or Block Management Area) if the kill was made in any of the following hunting districts: 100, 292, 312, 326, 405, 418, 530, 575, 670, 690, 701, 704:

_____

2002 MOUNTAIN LION SIGHTING SURVEY

Interviewers: Please read this introduction if there is a Mountain Lion Sighting label for the individual **and** if this person hunted DEER this past 2002 hunting season (deer survey question 1 is YES).

Introduction: FWP is currently conducting a long-term mountain lion research project. As part of that study effort, we are evaluating different methods of monitoring trends in lion abundance. One method we are testing is to survey deer hunters across the state in regards to the number of lions they observe while hunting deer. You can help by answering the following questions.

Interviewers: Fill out this form if **this person sighted a mountain lion while hunting DEER this past 2001 hunting season** (the answer to question 1 below is **YES**). Place mountain lion label above over "Introduction".

1. **Did you see one or more mountain lions while deer hunting during the 2002 hunting season?** ○ **YES**
2. **List up to 4 hunting districts where you sighted lions while hunting deer, the total days you hunted, and the total number of lions that you saw.**

Interviewers: The deer hunting district(s) where the respondent sighted the mountain lion(s) should be selected from the hunting districts (and days hunted) you listed on the deer questionnaire (deer questionnaire question 2).

Deer Hunting District Number*	Number Days Hunted for Deer*	Number Lions Observed (1-9)

* as indicated on deer questionnaire

Special Instructions to Interviewers

*Record only reported visual sightings of mountain lions made during the **2002 deer hunting season while hunting deer**. Disregard all other responses (observations made during previous years, while hunting other species such as elk, or observations of tracks, scat, etc.).*

Hunters who have questions about the survey can be directed to Rich DeSimone (444-0358) or Jeff Herbert (444-3940).